A SKETCH

—ON—

GASPESIA

—BY—

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QUEBEC
JOSEPH DUSSAULT, PUBLISHER

1884

TO

THE HONORABLE THEODORE ROBITAILLE

MEMBER OF HER MAJESTY'S PRIVY COUNCIL FOR CANADA, LIEUTENANT-GOVERNOR OF THE PROVINCE OF QUEBEC.

The zeal and care which you have shown for many years, to the region described in this small book, make me believe that you would condescend to accept of its dedication. By your speeches in Parliament, where you represented the county of Bonaventure for more than twenty years, and by the personal information which you have given me, I do not hesitate to style you the fondamental element of this work. Knowing the deep interest which you take in the place and its people, in spite of the high position that you fill, I dedicate to you this pamphlet in my name and in that of our kind friends of Gaspesia.

J. C. LANGELIER.

SKETCH

ON

GASPESIA

CHAPTER I

SITUATION—LIMITS—EXTENT—GENERAL ASPECT.

The great peninsula which forms the south-east of the province of Quebec is called Gaspesia.

This territory is situated between 49°15' at Pointe du Gros-Mâle, on the St-Lawrence, and 47°49' latitude, at the confluence of the rivers Ristigouche and Matapedia, also between 64°22', at Cape Rosier, and 68°6' longitude, at the mouth of the great river Métis.

The gulf of St-Lawrence forms the north-eastern limit of Gaspesia. It is bound, on the south, by the Baie des Chaleurs and the river Ristigouche, which seperates it from New-Brunswick, as far as the meeting of the rivers Ristigouche and Patapédia.

The western limit is formed by a line following the course of the river Matapedia to its source and continuing from there, to the head of the river Metis, whose course it follows till it reaches the St-Lawrence. It is measured from east to west on a line drawn between Point St-Pierre and the mouth of the river Metis; the greatest length of this territory is about one hundred and eighty miles. Its greatest breadth, when mesured from north to south, between the Point of Gros-Mâle and that of Bonaventure, is about ninety miles. The superficial extent between these limits amounts to 10,783.73 miles, or 6,900,941 square acres. This extent is divided into three counties which form Gaspesia :

	miles	*acres*
County of Rimouski	3,030.82	1,939,720
" Bonaventure	3,291.69	2,106,681
" Gaspé	4,461.22	2,854.540
Total	10,783.73	6,900,941

These figures do not include the extent of the Madeleine Islands, which, in a geographical point of view, do not form an integral part of the county of Gaspé, they also exclude that part of the county of Rimouski situated outside of the line, which forms the western limit of Gaspesia.

The extent of this territory forms a comparatively small area, not even a twentieth of the total superficies of the province; but, when compared with certain provinces of the Confederation or with some of the most populated and the most civilized States of Europe, we find that it forms a considerable region.

Countries	*Superficies*	*Population*
Holland	12,791	3,674,000
Belgium	11,500	5,000,000
Denmark	14,616	1,184,000
Switzerland	15,990	2,670,000
Scotland	30,685	3,360,000
Ireland	31,874	5,411,000
New-Brunswick	27,174	321,233
Nova Scotia	20,907	440,572
Prince Edward Island	2,133	108,891
Gaspesia	10,783	56,860

In supposing that Gaspesia had a population equal to that of Scotland and Switzerland, it would be able to support a million of souls. The realization of this supposition is not an impossibility, because the soil of Gaspesia is not as mountanious and is more fertile than that of Switzerland and Scotland, without taking into consideration its fisheries which constitute an everlasting source of Riches, which cannot be found in Scotland and much less in Switzerland. Moreover, these two countries are not able to furnish timber, as Gaspesia. to the different industries of the country.

As to the climate, the fertility of the soil and its adaptibilily to agricultural purposes, Gaspesia is not surpassed by New-Brunswick, and as this province is inhabited by 321,233 persons, or 18.7 inhabitants per square mile, Gaspesia could easely support, were it cultivated, a population of 201,655 inhabitants, because its superficies amount to 10,783.73 square miles. Final-

ly, the territory of Gaspesia is as rich, as susceptible of developement as Prince Edward Island, its climate is more favorable to agriculture, and it is accessible by sea and more so by rail: the extent of P. E. Island is not more than the fiftieth part of that of Gaspesia, and it is inhabited by a population of 108,891, from which we can easily conclude that the territory of Gaspesia would support a population proportioned to its extent, or five times the population, which makes a population of 544,455 inhabitants. In this case, the extent occupied by each person would be fourteen acres or about one hundred acres for each family, that is thirty per cent more than the extent occupied by each family in the province of Quebec, according to the census of 1871.

We can affirm that the region of Gaspesia would easily support a population of 500,000; at present, its population is 56,860 this clearly shows that this region is a country where a large number of immigrants could make a good living without overflowing this large territory.

Unfortunately this country has been ignored by immigrants who would have found many advantages which are not to be found in other parts of the province of Quebec. Besides the agricultural ressources, the colonist of Gaspesia has, by means of the fisheries, a sure way of supporting his family. The fact is, that actually, the greater number of inhabitants live by fishing and that abundantly Their richess would be greater if they would labor their farms more assidiously, during the summer months. In spite of their dislike to agricultural labor, the inhabitants of Gaspesia have all the necessary produces which they require, as the following table will show:

Extract of the census of 1871.

Produces	*Rimouski*	*Bonaventure*	*Gaspé*	*Total*
Wheat	62,006	10,214	17,485	86,695
Barley	71,015	27,616	40,029	138,660
Oats	51,599	162,822	55,677	270,098
Rye	21,871	4,448	12,084	38,403
Peas	22,385	2,583	10,438	35,406
Buck Wheat	7,062	40,737	1,717	49,516
Beans	92	353	81	536
Indian Corn	36	330	7	373
Total	236,066	249,103	137,308	622,687
Hay seed	67	354	733	794

Flax seed	1,265	364	80	1,709
Total	1,332	718	453	2,503
Potatoes	233,248	610,137	241,747	1,085,132
Turnips	8,301	61,781	64,358	134,440
Other root plants	926	1,785	1,968	4,779
Total	242,475	673,703	308,073	1,224,251
Hay, tons	5,215	10,842	8,439	24,496
Butter, lbs	168,985	166,103	127,779	462,867
Flax "	58,289	7,314	1,131	65,734
Wool "	33,088	35,879	21,896	90,863
Linen, yds	24,261	16,907	2,966	44,234
Frieze "	59,213	89,338	30,894	179,355
Total of Spun art	83,384	106,345	33,860	223,589
Maple sugar lbs	86,634	50,179	36,721	173,434
Tobacco "	1,939	42	269	2,250
Hops "	20	712	365	1,097
Apples bush	2	415	30	447
Other fruits "	28	286	15	329
Horses	1,917	1,906	1,246	5,069
Foals	372	410	203	985
Oxen	201	1,041	905	2,147
Milch cows	3,030	3,783	2,432	9,245
Other horn cattle	2,241	2,761	2,028	7,030
Sheep	14,638	12,616	9,447	36,701
Pigs	5,019	7,166	6,090	18,328
Total	27,471	29,683	22,351	79,505

According to the census of 1871, the produce of wheat has been 8.3 bush. per acre in Rimouski, 11.9 bush. in Bonaventure and 15 bush.i n Gaspé, making an average of 11.9 per acre for the three counties. This produce equals, and even exceeds that of the most fertile agricultural regions of other parts of the province. The following counties, according to the census of 1871, produce wheat on the average of this table :

Maskinongé	7.11	Bush	per	acre
Napierville	6 00	"	"	"
Bagot	7.69	"	"	"
Chambly	6,73	"	"	"

Verchères	6.19	"	"	"
Richelieu	7.46	"	"	"
Brome	13.41	"	"	"
Compton	12.89	"	"	"

It is evident that Gaspé surpasses by far all the other localities for its production of wheat, then Bonaventure produces 30 % more than the richest valleys of the Richelieu.

These facts lead us naturally to ask why the colonization of Gaspesia is not more advanced ?

The answer is the want of knowledge of this country and its backward situation. In all the publications, which are spread abroad to encourage immigration, Gaspesia is scarcely mentioned. Moreover, as this region is completely out of the way which the immigrants follow to enter the ports of Quebec and other great cities of Canada, they cannot even think of settling down in this country. The sole ports of Gaspesia which are frequented by english ships are Gaspé and Paspebiac, but the vessels which do come are destinated to load with fish, and with the exception of those belonging to the Robin firm, they come with ballast, not being able to accomodate passengers. Out of a population of 56,860 inhabitants, Gaspesia has not more than 3,067 persons who are not natives of the country, and out of these 3,067 persons, 1,025 came from Prince-Edward Island, Nova Scotia and New-Brunswick ; this leaves but 2,042 inhabitants who are not natives of the place, or less than a twenty seventh of the total population. Consequently, the population of Gaspesia has been formed by the surplus of the births over the deaths. Nevertheless, this did not prevent it from increasing in a very rapid and constant manner, which the following table will show.

RIMOUSKI

Dates	*Population*	*Augmentation*	*per* 100
1852	3,866		
1861	8,509	4,823	130.85
1871	12,958	4,449	52.28
1881	17,267	4,309	32.25

BONAVENTURE.

1852	10,844		
1861	13,092	2,248	20.73
1871	15,293	2,201	16.8
1881	18,908	3,615	23.96

GASPÉ

1852	8,702			
1861	11,426	2,724		31.33
1871	15,557	4,131		36.15
1881	20,685	5,128		32.96

ALL GASPESIA

1852	23,412		
1861	33.027	9,795	60.93
1871	43,808	10.781	35.08
1881	56,860	13.052	30.46

As we see by the forgoing table from 1871 to 1881 Rimouski has increased the most, it exceeds Gaspé by 0.29 and Bonaventure by 9.62 per 100. That is due to the Intercolonial Rail Road which facilitated the access of lands which before were inaccessible or too distant, and powerfully stimulated the population of that district.

With the exception of that part of the county of Rimouski which is designated in the census of 1871 by the name of Rimouski East, there is but one concession to be established in Gaspesia, that which borders the sea. The habitations form a band which completely surrounds the interior plain, and in Shoolbred, along the New River, in Maria and a few other localities, there are very few farms in the interior plain. Colonization has a vast field to explore there and if all the resources, the natural richness of the soil, the facilities of settling down of this beautiful region of Gaspesia were well known in our province and justly appreciated by our citizens who are in a position to help colonists, and were these richness and resources and facilities known to the immigrants of Europe, undoubtedly the population of Gaspesia would be 100,000 in 1891. Let us make Paspebia a sea port town, and in running there a branch of the Intercolonial Rail Road, the region of Gaspé would be entirely transformed before ten years and would be the richest and the most prosperous part of the province or of all Canada.

CHAPTER II.

TOPOGRAPHY—MOUNTAINS—RIVERS—SEASIDE—BATHING PLACES.

Gaspesia is an immense plain, the principal inclination being towards Bay des Chaleurs. This plain is divided into two parts by

the mountains of Notre Dame, which form the oriental extremity of the Alleghany chain. From Gaspé, these mountains extend along the Gulf of St. Lawrence, not being more than twelve miles from the sea shore. The highest part of these mountains do not exceed six miles in thickness. These mountains tend towards the interior, in a northwestern direction, then in the neighbourhood of St. Anne des Monts and of Cap Chatte they take to the southwest. The highest parts are in the region where Cape Chatte and Matane rivers take their source. On leaving Gaspé and going towards the west, the principal mountains which you will meet are represented in height and site by means of the following table :

The Eastern Terrace, on the banks of the Madeleine river			1,957	feet	above the sea
The Western Terrace			2,157	"	" "
Mount of Albert, in the height of the valley of the St Anne river			3,778	"	" "
Mount Logan	In the greatest valley of the Cape Chat river.		3,768	"	" "
" Matouasi			3,368	"	" "
" Bonhomme			2.269	"	" "
" Bayfield			3,973	"	" "
Round Mountain to the north of little lake Matane			3,676	"	" "
Mount St. Donat, between the Neigette river and the Metis			2,035	"	" "

Whatever may be the height of these summits this range of mountains does not form the limit of the northern descent of the plain of Gaspesia. The principal rivers which empty their waters into the Gulf of St. Lawrence take their source on the other side of the line described by this series of isolated mounts and nearly everywhere this descent occupies about the third of the total breadth of the peninsula. The main height, in the ravine cut out by the rivers, is about level in the waters of the lakes Huron and Michigan, which are something more than 500 feet above the level of the sea. The principal water courses which take their sources behind this mountainous tract are the rivers Madeleine, St. Anne, Cape Chat and Matane.

As regards its continuity and its altitude this mountainous range is of a various form. The axis of this chain is at a distance which varies from twelve to twenty miles from the St. Lawrence. Behind Metis, the summit of these mountains very rarely exceeds 1600 feet and this region forms rather a mountainous plain than a continuous range of mountains. Although the soil is not of a superior quality, nevertheless it is fit for

cultivation and it is better towards the St. Lawrence, where clay land is to be found especially in the valley of the river Metis. To the north of this range of mountains, there is an other mountainous stripe, but lower, on the other side of which there is a large band of fertile land. This band as all other bands which lie along the river edge, is very fertile and thicky inhabited. At the river St. Anne, the chain is divided into two branches; one of them tends towards the south and the other towards the sea. At Mont St. Louis, the chain tends towards the east and its height diminishes as it advances towards Cape Gaspé, where it terminates, leaving a large land of fertile soil between Cape Rosier and the Gulf.

To the south of this chain, there is a large interior valley somewhat undulated and bordered on the south and the north by mountainous stripes of land. Its breadth varies from ten to thirty miles and it presents all the characters of an elevated plain. The soil of this great valley is poor, light in certain districts, and strong in other places, but in general strong and fertile. There are large extents of beautiful land, especially in the region where the river Matane takes its source and along the Kempt road.

On the other side of Bay des Chaleur, there is an other line of heights which forms the southern limit of the valley which has been described, these heights are covered with hillock some of which are of a considerable height. Towards the north angle of the county of Bonaventure and not far from the Bonaventure river, there are three mountains which measure in height 1,394, 1,324 and 1,757 feet. Mount Conique towards the source of the river Cascapedia is 1,918 feet in altitude.

The meridional declivity of this range of heights gradually decreases as it tends towards Bay des Chaleurs. It forms a band of good clay soil about twenty or thirty miles in breadth, showing all the characters of a plain slightly elevated towards its northern limit, transversely cut by deep and narrow valleys which are watered by large rivers which take their source in the interior plain situated to the north of the mountainous range has been described. The land which borders Bay des Chaleur is of excellent clay. From Pointe au Maquereau to the river Cascapedia, the coast describes the area of a circle which considerably augments the breadth of this band of fertile soil. The land is level for more than thirty miles from the coast and is very good for produce. To the west of the river Cascapedia

the land is more undulated and nearly all the projections which border the sea are crowned from the interior by isolated mountains which measure 1800 feet in elevation, such as mount Tracadigeche, behind Carleton.

The mountains which border the river Ristigouche are not so high. The picturesque scenery which can be seen from the top of these mountains is delightful, and the mountains themselves form a scenery which is charming to the eye of the spectator who contemplates them from a distance. Their sides, sometimes upright, but generally slightly sloped, are surrounded by rich and extensive valleys. The land, not excepting the top of the mountains is rich and fertile, and generally clear of stones and thickly wooded with birch, maple, &c. The valley of the river Nouvelle is the richest part of this region, its soil is as fertile as that of the regions of the valley of the St. Lawrence and the Richelieu. The scene of the coast of Gaspé from the ocean is most delightful. On the gulf side, the coast forms a regular bend somewhat ondulated by small sinuosities scarcely perceptible at a certain distance. There are considerable depths at the mouths of the principal rivers; they are called by the inhabitants of the country *barachois* means lakes.

The mouths of the rivers are deep enough for the navigation of schooners and small vessels. At Matane, at St. Ann, at White River, at Mount Louis, at Griffon's Bar and at Fox River the water is deep enough to form small ports for bateaux which are employed for fishing purposes.

At St. Ann, the village is built on a sandy peninsula, formed by a *barachois* at the discharge of the river. The habitations extend along the river, on each side of this central point. The beach of the sand bar is white and level. As you advance from the river to the interior, the land rises and the hills are staged one over the other until you reach the Chickchaks the summits of which, in the neighbourhood are more than 3500 feet in height. There is a very pleasing place at St. Anne des Monts, which, during the summer months, is very healthy for persons who are strong enough to breadth a pure and cool air, while hunting and fishing around. At this point of the year, the coast is covered with a flock of black game; in spring and fall the huntsman is agreeably surprised at the sight of the quantity of ducks which abound along the rivers and of partridge in the woods.

Further down from St. Ann's we see the chimneys, their

name comes from their form, and several beautiful cascades being more than sixty feet in height, the whiteness of their waters form an agreeable contrast with the dark hue of the neighbouring trees. All this coast from St. Anns up, is high steep and cut by deep ravines. In the interior the land is good and could support a great number of families.

Mount Louis is situated thirty six miles lower down than St. Ann, it is remarkable for the fertility of its soil and for the abundance of fish which are caught each year and for the facility of communication. Wheat rises there as well as in the environs of Quebec. The habitations are built on the river side and are protected from the cold blasts by the side of a mountain.

The bay formed by the mouth of the Madeleine river is bound on the east by a gravel bank about a mile in length and a little above the level of high tide. On the western side the bay extends itself to the foot of a cragged rock, about ninety feet in height, aud which continues to extend itself until it reaches a quarter of a mile on the other side of the mouth of the river and forms cape Madeleine. The straits of glaised soil of which this cape is composed advance themselves from two to three miles to the interior and form a slight declivity which is very agreeable to the eye. The land is fertile and produces good crops of grain. The port is navigable for vessels that do not take a deep draw of water. This locality is situated at a distance of about sixty miles from cape Rosier and about seventy from cape Chatte.

Fox river bay forms a semi circle the diameter of which is about one mile. The entry is between two capes which are increasingly beaten by the waves; around the basin the lands present the appearance of an amphitheatre covered with verdure and browned with a hard wood bush. Towards the end of the bay and a little above the mouth of the river a barachois, bordered with beautiful fields, displays itself. The vessels which harbor in this bay are protected against the winds, with the exception of the north blast. Around Fox river the land is exceedingly fertile in wheat, barley, oats and potatoes, the latter are considered the best in Canada. Moreover, beside the richness of the soil, is not the sea at proximity with its inexhaustible treasure ?

Fifteen miles higher up than Fox river, a low land extends along the foot of the mountains and terminates at the sea in a

point which is not more than forty feet high. This is cape Rosier. Seven miles beyond this cape, is terminated, by the Fourillon promontory, the chain of mountains which border the north shore of the St. Lawrence. Fourillon is a narrow peninsula which extends about three miles into the sea, between the cove of cape Rosier and the bay of Gaspé. On the north side it is a naked rock perpendicular and reaching the height of 700 feet; it is the remain of a mountain the half of which has been pitched into the sea after being eaten away by the ice and water; the other half is still standing as straight as a wall.

At the south of Fourillon is the entry of the bay of Gaspé, a beautiful sheet of water about eight miles in breath and extending about eighteen miles between two heights. One of these heights is mountainous; the other is diversified by hills, valleys, woods and groups of houses. The northern land is generally hilly. Nevertheless, in some places, the mountains extend from the sea and leave at their base a stripe of land where the settlements of Grande-Greve, Cape aux Os and of Penouille are built. The best part along the coast is at the end of the Bay of Gaspé; it is separated from the bay in two points which leaves a navigable canal for large ships. Before entering the port, on the south side we meet with the mouth of the Little river St. John, not far from which is the village of Duglasstown, situated on a little hill. On the opposite coast is point Penouille from where we can see all the port and a great part of the basin, as well as the village. The rivers Darmouth and York empty their waters into port Gaspé. The mouth of the latter forms the basin, which is about one mile long and its depth varies from five to nine cubits of water. This interior port can receive a considerable number of ships.

On the south and east, the coast of Gaspé forms a more irregular line than on the northern side. Between point St. Peter, and Cape Canon, which forms the extremity of the promontory of Percé, are the bay and the barachois of Malbaie. Malbaie village is built at the end of the bay and at the entry of the barachois, which is separated from the sea by a sand bar five miles in length and two hundred feet in breadth. A fine view of the sea can be seen from the church. Towards the west, a lowland devided by the barachois and having a few inhabitants scattered here and there forms the end of the bay which is about three miles long and nine wide. At the other side of

this beautiful sheet of water, there are broken mountains over which mount St. Anne reigns the basis of which forms the rocks of Percé and Bonaventure.

Percy village, which is the principal judiciary district of Gaspé, is built on the point of the promontary, which borders the western part of the bay of Malbaie. It is one of the most picturesque sites in all Gaspesia. A great number of fishing boats are to be seen on the shore; along the beach may also be seen the fishermen's huts, where they save the fish, up higher is the court house, the settlements; further back on the top of a hill are built the church and presbytery. The land gradually ascends as we move from the sea and shows at the same time all the parts of the above tableau, framed by a semi circle of mountains over which reigns Mount St. Anne, which is 1230 feet high. We can see it at a distance of forty miles. On a fine day the view from the top of this mountain is magnificent. We can see Percé with its fishermen's huts, its two coves lined with barges, mount Joly, cape Percé, Bonaventure island, all lying humbly at the feet of their king. To the right, a bluish line strikes the sea and marks the direction which the coast follows, from Grand-River to point au Maquereau; to the left, the sight strikes on Malbaie, and the Bay of Gaspe and rests itself on the heights of Fourillon. The summit of the table of Rolland forms a plain which is bare of trees, but covered of wild grass. Percé rock seems to have belonged to mount Joly, in the times of yore, a small canal which is dry at low water, separates them. The length of this rockey island is four or five acres and its breadth is not more than seventy feet.

Towards the middle of this rock. the wares and the ice cut an arch, through which, barges can easely pass with their sails. The mount takes its name from the hole which it cuts through it. On mount Joly side, the cape is cut perpendicularly. In this direction, the elevated plain terminates in a point as it advances towards the sea.

From Percé to Cascapedia bay, the aspect of this coast is uniform. The sea shore is undulated at the mouths of the rivers and in the elevated parts, such as at Cape Desespoir, whose the shaggy rocks overlook the sea. But these elevations are comparatively few in number, and in general descend towards the bay in a nice slope, which can be seen in Paspebiac and New Carlisle. The latter locality is situated on a slight eminence and the village, which is the principal judiciary district of the county of

Bonaventure, presents a very agreeable aspect. About mid-distance between this village and port Paspebiac, we see the princely dwelling of Dr. Robitaille, the Lieutenant Governor of the province of Quebec. This beautiful residence is built on the declivity of a hill from where we can see the sea and port Paspebiac, where Robin & Co have their principal establishment.

Cascapedia bay, which is formed by the river of this name, extends from New Richmond to Maria. It advances into the interior and is surrounded by heights which are covered with beautiful verdure. New Richmond is not only one of the richest parishes but also the most fertile of this region.

More to the west is the bay of Tracadigetche, which is overlooked by a mountain of the same name. Both sides of the bay are formed by point Tracadigetche, at the east, that of Migoucha at the west. This bay is about ten miles long and four deep. I may say that it is surrounded, on the land side by the mountain, the highest part of which is 1,814 feet above the level of the sea. Between the church of Carleton and New river which empties its waters into the northwestern extremity of the bay, the flank of the mountain forms, nearly on all sides, an abrupt bank, leaving between it and the shore a band of clay about a mile in breadth and half a mile in lenghth. At the eastern extremity of the bay, is a barachois formed by the waters of the little river Carleton, which is surrounded by a gravely beach. That of the west extends a few miles into the sea, and is about three hundred feet in width from the foot of the mountain. This bank commands one of the finest points of view which can be had in all Bay des Chaleurs, and forms one of the most beautiful watering places in the Dominion. Protected from the northern blast by the mountain it is only exposed to the refreshing breezes which come from the sea and which maintain a moderate temperature during the summer season. On the bay side, the beach is slightly inclined and is covered with fine gravel, free from stones as well as from all other obstacles and is one of the most beautiful bathing places along the coast, besides, the rivers abound with fish of all kinds, in particular New river, where trout weighing from four to five pounds are caught. The land along the bay and in Carleton is cultivated with care, and the settlements have a look of prosperity and comfort which is not to be seen in all part of Gaspesia, with the exception of Great Rivers.

Between the rivers Patapedia and Nouvelle, the mountains extend towards the sea and to the shore of the river Ristigouche. The land is very hilly, but the soil is good and thicky wooded, even on the top of the hills. This region is a series of beautiful landscapes which are not surpassed in beauty by Scotland and Switzerland. It is the rendez-vous of a great number of amateurs who come from England and the United States to admire the pleasing aspect of these landscapes and to enjoy the fishing and hunting, which abound. Messieurs Vanderbilt and a few more millionaires of New York, forming the Ristigouche club, built a beautiful summer house at Matapedia where they pass the summer months in fishing, hunting, &c.

Better watering places, than that of Baie des Chaleurs cannot be found. The mildness of the climate, the purity of the air and the beautiful sceneries make this place a terestial paradise for those who want rest and who are obliged to resume their health. The weakest constitutions, the most delicate temperaments need not fear the cold nor the sudden changes of the temperature. The interior plain of Gaspesia hinders the cold and damp wind which comes from the sea from coming this far, and a beautiful breeze, which is able to give strength and vigor to the most changeable constitutions, is constantly to be felt.

Two of the most beautiful watering places are Carleton and New Carlisle. The beach is one of the finest and best situated for sea bathing the surrounding landscapes are delightful, in one word nature herself seems to have lent her hand in making these places two of the most attracting and balneal stations of the province. Carleton, in particular, is far the more attracting and leaves in the shade Malbaie. Cacouna, and all the other localities which attract each year thousands of tourists from the most distant parts of the United States. If this locality was better known, it would become one of the most fashionable bathing places, the *Old Orchard Beach* of the province of Quebec. Until these last few years, access was somewhat inaccommodous, on account of their being no other route but by sea, but now the tourists can very easily go there because the Intercolonial Rail Road goes from Carleton to Quebec in the space of twelve hours. Carleton is about 35 miles from the watering place, and is a very agreeable trip of two hours in a boat. All that Carleton wants to become a fashionable resort, are a few capitalists to build a good hotel. When that will be done, Carleton will become one of the most fashionable bathing resorts in the province.

CHAPTER III.

SUPERFICIAL GEOLOGY—SOILS—EXTENT.

In a geological point of view, Gaspesia forms the eastern extremity of the mountainous country which professor Hunt calls the apalachien region and is nothing more than the continuation of the eastern townships. The land of Gaspesia is the same as that of the Eastern Townships, that is in its composition.

These beds of earth belong to the geological formations which are called "Quebec Group" by Sir William Logan, founder of the geological commission of Canada. They form three series of layers more or less altered, irregular and belonging to the inferior silurian. These three series are: 1o. A series of paleologic straits more or less changed, in the greater number of localities, where they have been found; 2o. A series of eruptive rocks; composed of granite and trachite; 3o. A series of superficial deposites.

The alterations which, several of these paleological formations have undergone, which is easily seen by their perturbations, make it very hard to determine to which age they belong; but it is evident that they should be classed in the groupes of the inferior and superior silurien and on the devonien age.

A stripe of beds belonging to the foundation of the river Hudson, extends from Marsouin river to the cove of Tierce, a distance of sixty miles, on the borders of the Gulf St. Lawrence. These layers are composed of stripes of sand stone, dolomite and oily clay. Nevertheless, these formations are not so extended and not so important as those of the Quebec Groupe which lies on the lime and sand stones of Gaspé, as well as the under carbonic formation of Bonaventure, on the banks of Baie des Chaleurs. The Quebec groupe occupies a mid position, between the calcarous and Chazy formations, where both are found. They are devided into three formations which classed in an ascendant manner: Levis, Lauzon and Sillery.

The formation of Levis is composed of slate stone and black argil containing a great number of fossils. Lauzon is composed of red and green argils, sand stones and dolomite, but in particular strata in which are found mignesien rocks; chlorotie and serpentine. The formation of Sillery is composed of red and green argils, sandstone and dolomites, but in certain places changed rocks, cristaline deposits, gneissoide and epidotic strata.

Such are the rocks which form the bottom of the lands of Gaspesia. As we have already seen, they are nearly all covered with the calcaire and sandstone of Gaspé, also by the undercarbonic fer of Gaspé. The calcareous formation of Gaspé correspounds, by its position, to the inferior series of the Helderberg formation. Although the greatest part of it is composed of gray calcarous beds, it also possesses beds of argil and black gravel which belong to the mid silurien. The inferior part of this formation is met with in the Eastern Townships ; and the superior part, which contains the most calcarious substance, reaches its greatest developement in Gaspesia. At the eastern extremity of the peninsula, at cape Barry, at Percé as well as in several other localities, this calcarious substance presents itself in abrupt cuts which have been made by the water of the sea.

The formation of the sanstone of Gaspé corresponds as may be seen from the fossils which are found there, with the american geologist formation of Orishang, Hamilton and Chemung. It is composed of sandstone, argyle and interstratified conglomerations and possessing in certain places the remains of plants and a fossil state. At Little Gaspé cove, there is an impure and thin bed of coal in the strata, at Douglasstown and several other places there are sources of petroleum which transpires through this formation.

The formation of Bonaventure belongs to the lower carbonifer age, but does not possess coal. Its strata are composed of conglomerations, mixed with sandstone, red and green argils, sometimes possessing the remains of carbonized plants. In several places they are cut by dikes. They cover in a very irregular manner the sandstone beds of Gaspé. This formation is met with on the eastern coast of Gaspé, in particular along Baie des Chaleurs, where Sir William Logan estimates the thickness to be not less than 3000 feet.

On the formation of Sillery and Quebec which form the northern coast of Gaspé, lie in descendants stratifications, 700 feet of limestone and slatestone, in which there are many fossils, which represent the superior silurien bed. On the south side of Gaspé, the high devonien beds are covered with 1000 feet of horizontal beds of sandstone which form the base of the coal basin of New-Brunswick, but do not contain combustible minerals. The fossil-limestone of Gaspe can be traced up from the south-east to lake Memphramagog. The devonien bed which is silicious in the county of Gaspe, passes toward the southern

beds of limestone which are found in the same valley with silurien limestones which we have already mentioned.

The extent of the Bonaventure formation is small. It forms the band which lies between Bay des Chaleurs and a line drawn from the confluence of the river Matapedia with the Ristigouche to the head of the Cascapedia bay, then an other line extending from the mouth of the little river Cascapedia to the enlargement of the river of Port Daniel, finally a third line leaning Douglasstown, tending a little to the west, at its mid-lenght, and terminating in the neighbourhood of the mouth of the Grand River.

The Quebec Groupe forms a band whose width varies from fifteen to thirty miles along the shore of the Gulf, between Metis and cape Gaspe. Its breadth augments as it tends towards the west, and is intérrupted by a small band of land belonging to the formation of the river Hudson, between Marsouin river and the Tiercy cove, and at its south extremity by a small extent of land, belonging to the formation of Chazy, between the river St-Ann and the head of the river Madeleine.

The space between these two bands, bording the shore of the Gulf St-Lawrence and that of the Bay des Chaleurs, is occupied or rather covered with the calcium and the sandstone of Gaspe. The sandstone forms an oblong square extending in a straight line to the west of that part of the Bonaventure formation, which lies between Duglasstown and Cape Rouge and continues until it reaches Bonaventure river, and stops in the interior. A little further west, at mid distance between the gulf and Bay des Chaleurs, there is an other area of sandstone which extends from the northeast to the north west between the rivers Cascapedia and Matapedia, finally these sandstone beds surround the mouth of the two rivers Cascapedia and form a bar which unites the two parts of the Bonaventure formation, which borders Bay des Chaleurs on each side of the New Richmond.

The following table will show the extent of these formations:

Formations	*Miles*	*Acres*
Gaspe Calcium	4,000	2,560,000
" Sandstone	3,000	1,920,000
Quebec Groupe	3,000	1,920,000
Bonaventure Formation	600	384,000
Hudson "	184	117,760
	10,784	6,901,760

This table clearly shows that the greater part of the soil of

Gaspesia is good, easily cultivated and produces hay and wheat in abundance.

The calcium formations occupy an extent of 2,560,000 acres, which is sufficient to form 12,800 farms of 100 acres each, that is after deducating the half on account of the secondary land. This deducation is rather much, because it is well known that the calcium formations very often offer good land. By the action of the water and the atmosphere, these rocks fall into dust and form a fertile and easily cultivated soil.

These calcareous soils belong to the selurien formations, which is met with in all parts of Northern New-Brunswick. These formations possess the richest soil in the province. The fertile and well cultivated farms in the valley of the Kistigouche river which cover both sides of the St-John, lie on these rocks and are partly formed by them.

The land of this formation is generally heavier and stronger than that of the carbonifer region. The rocks of which they are formed are generally hard and in mouldering to dust create good tought land.

Beds of good limestone, very rich in fossils, abound. These formations constitute the best and richest soils in the west of New York.

The hard sandstone which covers a great extent of the Gaspesia forms good and fertile soils. The richest and best cultivated farms of Scotland lie on red rocks of this species. The beautiful soil of the valleys of Sussex, Sackville and river Shepody are close to rocks of same nature.

Professor Johnston, who made a special study of the different formations of New-Brunswick, says that the beds of these sandstone formations are composed as follows:

1o Red conglomerations which, in breaking up, form poor granely soils, which, when well measured, give splendid crops of oats &c.

2o. Fine red-sandstone which, being reduced to powder, forms a red sandy soil, light and easily ploughed and which produce in abundance, when well cared. These farms are very much sought for in New-Brunswick.

3o. Red beds of argil, commonly called " red clay, " interstratified with beds of red sandstone and which, reduced to dust, form good soil which has a reddish cast. This soil is the most productive.

Nevertheless, the fertility of the soil has been proved by abun-

dant harvest which it produced from 1871 to 1881, which may be seen at page 8. The comparison is still more advantageous when compared with the other provinces of the confederation.

Gaspesia		*Bushels of wheat per acre*
Gaspe	15.00 bush	
Bonaventure	11.70 "	11.66
Rimouski	8.30 "	
Province of New-Brunswick		10.85
" Nova-Scotia		11.78
" Quebec		8.04
" Ontario		10.42

That is to say Gaspesia produces 1.24 bush. per acre, more than the province of Ontario. And we can utterly say that if Gaspesia was as well cultivated as Ontario the former would give 25 per cent more.

It is evident that the soil of Gaspesia is rich and fertile and capable of supporting the colonist who would cultivate it with care.

CHAPITRE IV.

MINERALOGIE—MINERAL SPECIES—BEDS SUSCEPTIBLE OF EXPLORATION.

The mineral riches of Gaspesia is unfortunately unknown. The explorations of the geological commission have been few and limited by the band of land which is in the neighbourhood of the sea or by some of the principal rivers which cross this region, and, We must say, too quickly made to produce the result which a close examination would give.

The most competent men have not the least doubt of the mineral riches of Gaspesia and they are persuaded that when that fine country can be more easily visited and explored there will be found rich mineral deposits. Here is what the Minister of the Interior says in his report of 1882:

"This region is probably very important, but the difficulties of its explorations are very great. The dense forests which cover all the extent between those rivers, with the exception of the summits of the mountains; the want of roads; in fine, all these obstacles have prevented our geologists from making an exact examination of the place.

"Nevertheless we can affirm that this vast country has no

connection with the inferior selurien formations of the Quebec groupe, but constitutes an isolated area of formations which make the principal zone miniere of the eastern townships. This zone extends from the frontier of the United States to the north east of Quebec. Until now we have not found anything more than serpentine rocks and chromic iron in the region of Shichshock; but as these minerals are generally found with cottonstone, brass, lead, antimony and iron, also with gold and silver, it is not likely that we may find these minerals in the unexplored region of Gaspé."

Professor Hunt expresses the same opinion in his work published in 1865. He says: "The Eastern Townships are included n the rising zone, situated to the south of the St. Lawrence, as well as the more southeastern region extending along the frontier and forming a succession of valleys which continues from the sources of the river Connecticut to the north east of Baie des Chaleurs. The Eastern Townships, as they are generally described, do not include this prolongation towards the north east, but as it geologically and geographically belongs to them, we may include it under the same name. Moreover the Eastern Townships abound in metallic minerals, marble, slate stone, &c."

The above citations clearly show the mining richess of Gaspesia. After describing the geological formations of Gaspesia, we must admit that the peninsula of Gaspé, possesses the same mineral riches as Eastern Townships, unless that nature had endowed the southwest more than the south east, with her riches. It is so contrary to the laws of nature, zoological teachings, and common sense that it requires no refutation. But there is a very good proof of the mineral richess of Gaspesia, which we will show.

Cottonstone.—This useful mineral, which is the object of considerable exploration in some part of the Eastern Townships, has been found by Sir William Logan in the environs of mount Albert, at the extremity of Shichshock mountains, in the neighbourhood of the Serpentine. This layer is, of itself, of no importance; but it indicates the existence of thicker beds, which undoubtedly we would discover in making a careful examination.

Limestone.—The inferior silurien limestone rocks of the formation of Chazy, and of the Trenton groupe, which furnish us with the best limestone, are met with on several places belonging to calcarious beds of Gaspesia. The most considerable deposit is found at Port Daniel. It makes splendid lime. Large quantities

are exported to Prince Edwards Island where there is no limestone. The stone is drawn in trainways to the ships which are loaded with it. The exportation of this mineral is yearly increasing. It is an important industry for this locality, which can furnish good lime, for building and farming purposes, to all the parishes of Bay des Chaleurs.

Hydraulic Lime.—Certain impure limestone gives by calcinotion a substance which, instead of dissolving in water as ordinary lime, forms a paste which hardens when it is exposed to water. This property of hardening in the water, is due to the presence of argile, which is a silicate of aluminium. Therefore a good hydraulic cement can be made by mixing pure lime with a certain quantity of argile and calcinating this mixture. It is in that manner that the Portland cement, and several other similar compositions, in France and England, are made. Nevertheless, when it can be procured in its natural mixed state, it is far better than the artificial mixture. Sir William Logan says, that the magnesium lime, mixed with calcinated argile, makes a good hydraulic cement.

There are clay limestone and dolomite which make good hydraulic lime, in a great number of places in Canada. There are thin beds of dolomite at Portage mountain, in the Quebec group, about five miles from the mouth of the river Madeleine, in the county of Gaspe. When analysed, it gives twenty-five per cent of argile. When calcinated, it becomes cream colored, and makes a cement that hardens in the water, in the space of five minutes. Six miles below Grand Pond river, there is a rock which resembles it very much at Grande-Coupe, and it is very likely that other beds could be found in the same region. (1)

Mr James Richardson of the geological commission of Canada, has also studied these rocks and declares that they can make excellent hydraulic cement. The black dolomite, says he, becomes yellow by the action of the weather and the air. They are found at Mountain Portage, and are the same as those of Grande Coupe, six miles lower down the Great Pond river and form a matter which makes a hydraulic cement, hardening into a tenacious and yellow mass, after being under the influence of the water for a few minutes. The extent of the formation which possess these bands of hydraulic cement, shows that a great quantity of this stone can be found in the localities which border the south of the St-Lawrence.

(1) Geology of Canada, page 854

The transformation of these cement stones could be the object of a considerable exportation. In 1882, we imported in Canada $83,330 dollars worth of hydraulic cement. The province of Quebec alone imported $49,339 dollars worth and New-Brunswick $11,705.

	Great Britain	*U. S.*	*Germany*	*Belgium*
Brute substance on pulverized stone.....	.....	$13,694	.....	.....
Portland or Roman Cement.....	$49 910	13.953	$2,619	$4.00
	$49,980	$27,647	$2,699	$4.00

We imported from the United States 11,985 barrels of pulverized stone, thirty-nine tons of large stones and 386 bushels of prepared stone.

Why could we not replace those importations in intelizing the stone of the Madeleine river? It makes as good cement as that imported and it is very easily prepared. This mineral is on an inclined plain, situated about six miles from the sea which renders the transport very easy. The calcination would cost very little, on account of the abundance of wood. Were it necessary, the river could supply a strong water-power to grind it. The bay, which is at the mouth of the river, offers a good port to small vessels, which are the best for transporting this stone or cement. Nothing is wanting to render the exploration easy, without speaking of labor, which does not cost much in this region. On this point, we wish to draw the attention of our capitalists who could easily furnish us with all the cement that we require in this country, and also export a great quantity.

Slatestone and Millstone.—Sir William Logan, who personally explored these localities, says: " We can easily obtain magnificent flagstones and slates in a few calcareous beds which are a little to the west of Vieille cove, are easily split to the required thinness which is due to the presence of mica. The silicious conglomeration, at the basis of the calcareous series, as well as others of a similar character and better quality, on west river, would make fine millstones. (1)

Seythstones.—At the falls of Dartmouth, in the winding which the river makes to the north of mount Serpentine and along this river, the lower calcareous beds are soft and sometimes thin enough to make scythe stones. (2)

Surveyor Sullivan found in the valley of Bonaventure river rocks which would make fine scythe-stones and even good shar-

(1) Geology of Canada, page 470.
(2) *Idem*, p. 935.

pening stones for other cutting instruments. These rocks lie in and can be easily cut out, as the samples which Mr. Sullivan brought with him clearly shows.

Serpentine.—At the eastern extremity of Shickshock mountains, there is a large quantity of serpentine which seems to rise above the calcareous conglomerations, with a band of thin black-gravel, which seperates it from the conglomerations, and turns around the south-east of the chain, forming mount Albert, one of the principal summits. It continues towards the south-west for a considerable distance, along the tributary of the great river Cascapedia, forming the south flank of the chain, and further on dissapearing under the mid-selurian bed. The thickness of the mass of Serpentine is about 1000 feet. The entire extent shows the appearance of a stratification which is more or less distinct in some places. A great part of the 600 inferior feet is of a dark green colour, on the same line as the beds, towards the head, the colour is of a reddish brown green, which is due to the appearance of small cristals which abound all through.

The 400 upper feet show the position of these beds by the different colors of the parts which are exposed to air.

The surface which is exposed to the air is surrounded by red and dark-white bands. The white streaks are larger than the red, they vary in breadth from a line to half an inch and often become interstratified with beds of a cream color, which vary in the same way. When the serpentine is hewn and polished it shows brown streakes, parallel with dark red lines resembling veins, which intersect those which are red on the surface exposed to the air. These red lines are sometimes disposed in false beds. At mount Albert, in Gaspe, the serpentine which is mixed with chloratic and epidotic gravel which have been described in page 281 (GEOLOGY OF CANADA.) covers an extent of not less than 10 square miles. A great part of the serpentine is distinctly stratifiee and often streaked with red and brown colors. Without doubt, we can find there and in many other localities of that region great quantities of variegated serpentines, which could be used as marble. The serpentines of Roxbury and Cavendish, in Vermont, which is found in the continuation of the same formation in eastern Canada, have been explored under the name of ancient roman marble. It resembles the ancient green marble which was found in the ruins of Rome.

The Serpentine similar to that of the eastern Townships and Mount Albert is explored on a high scale in France, Italy and

England; it is used for making tables, aud decorating churches. The price of these variegated blocks of french serpentines was, in 1854, $3.00 to $3.50 per cubic foot, and of polished flagstone $0.60 to $0.70 per square foot.

There are considerable quantities of serpentine in the environs of mount Serpentine, which could be profitably employed. The transport of this marble can be easily made, particularly that of mount Albert. This locality is situated between the sources of the rivers St. Anne and Cascapedia. It is very probable that this course of water could be utilized to bring down the stones on flat boats. This would do to begin with, but when the business would increase, it would be easy to built a narrow railroad which would not only accommodate the exploring company. but also increase the settlements by the advantage, which it would be to them. This railroad could also be utilized for the transport of wood which abounds in the valley of the Cascapedia river. The chronic iron and the cotton stone which are found in mount Albert, with the serpentine, would furnish their contingent to the traffic of this railroad.

Marna.—This substance has various uses. When it is pure, it is used for whitening ships and cleaning metals, &c. When calcinated, dust forms a very white lime which makes first class mortar. But it is principally used for agriculture purposes, for the amelioration of sandy or clay land. It supplies the want of lime to the clay soils, and to sandy clay it gives it a consistance which makes it produce abundant crop. In Europe, but in particular in France, this substance is highly valued for renovating the land.

This mineral abounds in Gaspesia, especially on the shores of lake Metis, at its highest extremity, on the St. Lawrence coast, five or six miles lower down than the Matane river, and in the environs of New Carlisle and Baie des Chaleurs. A few miles from the village in a valley of a mile and a half square, there are five or six small lakes, along whose shore and bottom there is a bed of marna which is white and pure, being about five inches thick. At Matane, the deposit, which is about fifteen inches thick, forms the bottom of several swamps which cover the surface of about fifteen square acres. This substance could be advantageously explored by the neighbouring inhabitants.

Chrome.—This mineral is found in large quantities in the serpentine rivers of mount Albert, on the banks of the St. Anne. We meet with it under the form of chromic iron, in detached

masses weighing more then twenty lbs. each, and according to the report of Sir William Logan, these beds were followed up the distance of half a mile and contain large deposits.

It is out of this chromic oxyde that we obtain the bi-chromate of potassium, with which we prepare the chromate of red and yellow lead—or yellow chrome—also the oxyde of green chrome, which is used as green paint and indelible green ink. Large quantities of bi-chromate potassium are used in dyeing and in the making of cotton-print. This bi-chromate of potassium contains forty seven parts of potassium and one hundred of chrome. The value of this salt is estimated according to the quantity of chromic acid contained in it, some years ago, it was sold at the rate of $1.00 for each unity of chromic acide. A sample taken from Ham mine was sold in London for $58.33, because it contained 57-4 per 100.

This is the manner in which bi-chromate of potassium is prepared:—The mineral is poundered very fine, and is mixed in the powder of crude potassium, then the mixture is calcinated in a furnace through which passes a current of air which oxydizes the chromic oxide and combines it with the potassium. The salt thus obtained, is dissolved in water and this solution covered with a certain quantity of sulphiric acide, then it is cristalized by evaporation, this mixture constitutes the bi-chromate of potassium which is sold in commerce.

If the transport, between Matane and mount Albert, be possible and not too expensive, it is evident that this mine of chromic iron would be the object of a paying industry. The small expense that it would require to buy the mineral and the wood to calcinate it and make the potassium, would pay a manufacturer more than 40 or 50 per 100. Or it could be sent to England in a crude state to be mixed with sulphuric acid and reduced to pure bi-chromate of potassium.

Nevertheless it is evident that there is there a rich mine to be explored, and it is well to let enterprising men know it.

Lead.—Galena is found in large enough quantities to be explored in the veins which cross the lime stone rocks of Gaspé, at cape Gaspé, and at Anse des Sauvages. At little Gaspé Bay the vein is found in a calcarious stratified mass which prolongs about 24 ° S. W. and forms towards the north a mountain 700 feet high, that is to say the promontory of Gaspé. This vein is about eighteen inches wide; it is composed of hard substances possessing masses of galena and small pieces of blenda and copper. In

sinking a well twenty feet deep in the principal vein and in a few others in parallel line we obtained twenty tons of mineral which gave twelve tons of pure lead. We have also found galena in several other localities, in particular in the calcarious beds which lie along the promontory of Gaspé, also on the north coast, in a vein which appears to be the continuation of that of the cove of Little Gaspé. We have also found small quantities of galena in the limestone rocks of Percy as well as at Cousin cove (1) and it is evident that we would have found more in those places, had we made a better search. Nevertheless, from what we know it is certain that it would pay to explore it.

Copper.—This mineral should abundantly exist in Gaspesia, on account of the Shickshocks mountains which are composed of chloritic rocks which in the Eastern Townships, form the Acton, Wickham and Harvey Hills. If we have not found any of these copper mines in Gaspesia, it is due to the forests, which cover nearly all the soil and prevented us from making the searches which we made in other places with so much success, in the same geological formations.

The only places in which we noticed copper deposits, in Gaspesia, were at the mouth of the Grand Capucin, four miles lower down than cape Chastes and in the neighborhood of mount Serpentine, near Gaspé Bay, and at Port Daniel. We found copper pyrites in a mine of quartz at Grand Capucin. Six miles from the head of Gaspé Bay we found near mount Serpentine samples of this pyrite. Finally, we are certain that the inferior parts of the limestone rocks of Port Daniel possess small quantities of copper, and Sir William Logan says there are the same probabilities of the presence of copper déposits in all the eastern region (Gaspesia) as in the townships situated more to the north east,

Fossil Resine.—This substance is found in some of the devonian beds of sandstone of Gaspe. It has the form of irregular leaves and is found on the exterior edges of those beds of sandstones, in beds about $\frac{1}{8}$ of an inch thick. It resembles amber, but it comes nearer to the middlestonite resin. The analisis of this substance is as follows :

	(I)	(II)	(III)	(IV)
Volatile matters	32.4	22,8	42.8	30.4
Carbon	8 9	8,1	7,4	8.9
Residue	58.7	69 1	49.8	60.7
	100.0	100.0	100.0	100.0

(1) Sir William Logan, *Geology of Canada.*

In distilling this matter as coal and bitumineous gravels are distilled, large quantities of oil could be obtained which could serve as coal-oil. In order to find out if gas, could be made of it, experiments were made on one pound of the mineral, the result was $2\frac{1}{4}$ feet of gas, which gave a beautiful light when ignited. The rubstance lost 26 per cent of its weight by distillation. As this volatile matter contains 33 per cent of resin, it is evident that if this resin could be procured in a purer state, it would advantageously substitute the coal which is used in making gas. (1)

The samples used in the above experiment came from a bed of fifreen inches in thickness, which is near Shaws' mill on the north side of the Gaspe basin. This bed has been followed up for the distance of 200 feet at the end of which it sank into the sandstone. The same substance has been found along the York river for more than thirty miles. The beds are from five to six inches thick and one hundred feet long Same of them are generally composed of small bright matters of a brownish color, which present the same translucididy as the above mentioned vein, although it sometimes contains less ashes and is mixed with carbonacious matters. A sample coming from York river gave, by analysis, 52.4 of volatile matters and 26.3 of Carbon and a residue of 21.3. The graatest quantity of volatile hydrocarbon which is obtained from this substance, renders it more valuable, for distillation, than the resin which came from the deposits of Shaw's mill. These various deposits, says Sir William Logan, merit to be studied as an important point of economy.

Petroleum.—Thirty years ago, the members of the Geological Commission of Canada, discovered petroleum in the rocks of Gaspe. Other explorations have shown that this mineral exist in severel places of this region, on the banks of the rivers Dartmouth York, St-John and Malbaie. In several places of this region, the limestone rocks are covered with sandstone the inferior part of which is of the same age as the Orkeny formation. This sandstone is discovered at the mouth of the river York, and is impregnated with petroleum. On the banks of the same river, about two miles from the Gaspe basin, small morcels of bitume are found in the cavities of a dike cutting the sandstone. The source from which the petroleum of Silver Brook springs, is situated towards the south-east at an angle of 13o and about a mile from the anticlimax. The oil which is gathered in the ponds along the

(1) Sr William Logan. *Geology of Canada.*

stream, has a green color and a far less aromatic odor than that of the Ontario petroleum. A little further west, about ten miles from the mouth of the river, the oil floats on the surface of the water. There is also petroleum at Adam fountain, behind the lot B of York village, a few miles from S. S. E. of the Gaspe basin. The petroleum sweats through the mud in a parallel line with Sandy Beach and Haldimand, both of these localities are on a bed of sandstone which passes a little to the north of the source of the Silver Brook. A little to the east, two miles west of Pointe-au-Gourdon, which takes its name from the petroleum which is found there is an other source which is three quarters of a mile from Marsouin cove. On the north side of the banks of Douglasstown, about a mile west of the village, petroleum, sweats through the mud and gravel of thc beach. Further west at the St-John, there is also petroleum and on the sides of a stream which discharges its waters into St-Georges cove, on the north eastern side of Bay Gaspe.

Two wells have been dug in these regions, but the result was not encouraging, one 200 feet deep, on the banks of York river and the other 125 feet, about Douglasstown. Professor Hunt (who is considered as an authority in these matters) says : the unsuccess of these wells should not be looked on as a discouragement, because it was tested, that of two wells, one may fall on a fissure, or a vein which is not deep and that the other may not fall on one, or the oil at a greater depth, which must be attributed to the irregularity of the fissure. As to the natural oil springs, it must not be forgotten that petroleum can run on a certain distance, in a horizontal position, under the impermeable strata and finally burst forth at some distance from one of the sides of the reservoir. Indeed, in some places the beds of sandstone are very thick (sometimes 4000 and even 7000 feet) even on the top of the anticlimax, and it might be necessary to dig wells along these lines, before being able to prove the existence or absence of sufficient quantities of oil in these regions. Nevertheless it must be remarked that the thickness of the beds of sandstone covering the calcarious oil veins of Gaspé has the same appearances as those of west of Pensylvania, when the oil wells are dug in a similar formation of sandstone, of great thickness which covers the sandstone and which, as we have tried to show, has favoured the accumulation aud conservation of the petroleum coming from the inferior formation. The devonien sandstone of Gaspesia occupies an immense area extending

towards the west of Metapedia river, and it is probable that petroleum can be found in other localities of this region.

That is very probable, and undoubtedly if the government would order the geological commission to make more extensive investigations than they have ever done before and to dig deeper wells than those on the banks of the York and in the environs of Douglasstown, they would find more petroleum springs than those of Ontario.

CHAPTER V

FISHERIES.—STATISTICS.—ARTIFICIAL MANURE.

The fisheries of Gaspesia are the richest in North America and perhaps in all the world. They have been explored during two hundred years and their produce has given millions of dollars to speculators. The firm of Chas. Robin & Co,, Jersey, made there a fortune of several millions, and was at the head of the fish business in America and Europe. The establishments of Le Bouthiller & Bros., J. & E. Collas, J. Le Bouthiller & Co. and Valpy & Le Bas did large business.

The principal fish that make the object of this exploitation were the cod-fish, the sharper, the herring, the mackerel, the salmon, the lobster and a great number of other fishes of less importance, but which would add a great deal to commercial explorations, were they sold where they are in demand.

The cod-fish is the best and the most abundant, in number and size. It constitutes and assures a ressource in Gaspesia as the land harvest; the poorest man in the place can make a good living for his family by fishing.

The fish are generally caught in Gaspesia, along the shore, in the coves and bays, and sometimes out thirty miles from the shore. The fishermen who have means, build their own boats, buy the necessary fishing tackle and fish during the summer months, and sell their fish to the merchants or cure them themselves and wait to sell them to speculators, who go down there in the fall to buy all the fish they can find. They who have not the means to buy their own fishing tackle and boat, hire them from the fish merchants. The rent of one of these vessels, the fishing tackle included, varies from $25. to $35. for the season and the bargain generally stipulates that the fish caught by one who has a hired

vessel must be sold to the Company that lets the boat. These vessels are about thirty feet long and six wide. They are made of cedar and both stern and bow are pointed. They are rigged with two sails and stand the waves very well.

They who leave on shore fishing generally, start at two o'clock in the morning and come back at four in the evening that they may have time to prepare their fish before dark. Each vessel is worked by two men, who fish with two lines in deep water and three in low water. When the fish take well, the men have not one moment to rest while they are taking one fish off the hook, the other line is pulling. Each line has two hooks, and when the fish takes well, each line heads up two fish. Thus, it very often happens that towards evening, you would see two men coming in with 2000 lbs of fish.

The fish on the banks are taken with net lines which are about 600 or 1200 fathoms long, held at each end by anchors. They leave the line for six or eight hours in the water, and, at certain season, particularly in the month of september, two men very often take in a few hours, with a net-line of 500 fathoms, more than 6000 lbs of cod-fish. From the 15th of June to the 15th of september, two men can take 600 qts. of cod-fish; the average is about 400 qts. and as the fish is sold on the shore for $1 or $1.25 per qts, the profits are about $500 for each fishing barge or $250 for each man. Fishing generally commences in april and finishes in november. This period is divided into two seasons: summer and autumn. The summer fishing finishes the 15th of August. The cod fish which is caught until the end of september, is dried and prepared for exportation; what is taken after this date is salted, put in barrels and sold on the local markets.

As we see, cod-fishing is a good paying business and an industrious man can earn from $300 to $400 during the fishing season. The herring season begins in April and ends in December. They are generally caught in nets or drag-lines.

These nets are generally thirty fathoms in lenght and six in breadth. They are vertically set in the water where the herrings pass and they are lifted every morning. In the springtime, when the fishing is good, each night a fisherman takes from five to ten barrels of herrings in one net.

Dragline fishing is more expeditious. These draglines are from 100 150 fathoms in length and eleven in breadth. They are cast in deep and very often take in one drag enough of fish to fill 500, 1,000, 2,000 and even 3,000 barrels of 200 lbs each. For the

mode of fishing, a boat worked by eight men is used. Twenty men go out in small boats and sail about in all directions until they find the herrings beds. Then the signal is given and the net is cast and drawn to the shore. When the net is too heavily loaden, they do not drag it to the shore, but unload it by the means of smaller nets. This manner of fishing is not generally made use of in Gaspesia on account of the enormous price of these large nets.

It is nearly impossible to form an idea of the abundance of herrings. In the spring time they form banks so thickly pressed together that thousands are killed by the waves and by rubbing themselves one against the other. Dr. Fortin, who was guardian of the fisheries of Gaspesia, says that he often saw the beach covered with a bed of herring spawn, more than two feet thick. This may appear surprising to some people; but when they know that a herring lays more than a million of eggs, they will not hesitate to believe the above statement. The above figures show the importance of the herring fisheries.

Mackerel is caught in lines and in nets in the same manner as the herring. The lines which are used for mackerel fishing are made of hair or cotton and are about 48 feet long. The only bate used is a piece of a mackerel neck. Each fisherman takes two lines which are tied to the boat, and when the fish take, fifteen men can catch, in six hours, from 20 to 30 barrels of mackerel, from eight to twenty dollars per barrel, according to the quality.

Lobster fishing is also a good paying business. They are taken on the banks of Bay des Chaleurs. The mode of fishing is very simple. They are caught in small wooden traps whose ends are covered with a net in the centre of which is a small hole. A piece of fish is put in the center of the trap. The lobster goes in to the box easily, but cannot get out. The trap is anchored to the bottom of the river by means of a large stone and the line of boxes are tied to a thick rope which floats on the water. These lines are many acres long and sometimes longer, according to the extent of the lobster bed. The fishermen visit their traps two or three times a day. By means of the thick cord into which the small boxes are tied, he lifts the boxes to the surface of the water and if there be a lobster or lobsters in, because two or three are often caught at once in the same trap, he takes the cover off the trap and catches the lobsters by the horns and throws them into his boat. He puts another

bate and lets the trap sink to the bottom and continues in the same manner untill all the boxes are examined.

The lobsters which are caught, are sold to men who have large establishments for the purpose of curing them. The live-lobster is generally sold ot $0.40 per cwt, and it often happens that a fisherman takes 500 lbs, per day. The above details tell enough about lobster fishing, which is a paying business to the farmer living near the shore.

Salmons are caught in nets which are cast on the sea coast, in the coves and at the mouth of the rivers. At hightide, the fish pass over the nets to go up the rivers ; but as soon as the tide goes down they turn down towards the sea, where their passage is intercepted by the nets. They stick in the nets until the fisherman takes them into his boat. Some fisherman have caught from fifteen to twenty barrels of salmon after one tide. A barrel of salmon weighing 200 lbs sells from $15, to $20.

The fisheries which have been described furnish the cities of Canada and other foreign places. The following figures which are taken from the official statistics of the minister of the marine and fisheries will show the importance of this industry which constitutes one of the principal sources of the riches of Gaspesia.

The following table shows the quantity and value of the fish caught in Gaspesia during 1882.

Codfish :				
Summer take	58,.101 qtz	at $ 4.00	$232,404.00	
Autumn "	36,116 "	at 4.00	144,464.00	
Tongue	170 bar	at 9.00	1,530.00	
Broken Codfish	1,106 "	at 1.00	1,106 00	
Codfish Oil	67,283 gal	at 0.60	40,369.80	
				$419,873.80
Herrings :				
Salted Herrings	20,571 bar	at $ 4.00	$ 82,284.00	
Smoked "	3,078 bar	at 0.25	769.50	
Manure "	23,488 bar	at 1.00	23,488.00	
				106,541 50
Mackerel :				
Salted Mackerel	994 bar	at 6 00		3,976.00
Salmon :				
Salted Salmon	27 bar	at $15.00	$ 405.00	
Fresh "	147,408 lbs	at 0,07	10318.56	
				10,723.56
Lobster :				
Canned lobster	147,430 lbs	at $ 0.15		36,964.50
Various kinds of fish :				
Sharper	366 qts	at $ 4.00	$1,464.00	
Small Cod	203 "	at 4.00	812.00	
Fletan	122 bar	at 6 00	732 00	
Trout	203 "	at 8.00	1,624.00	
Eel	36 "	at 7.00	252.00	

Sardine	729 "	at	3 00	2,187.00	
Small fish	99 "	at	2.00	198.00	
Various fish used in the locality	9,632 "	at	4.00	38,528 00	
Eturgeon	70 "	at	5.00	350.00	
					46,147.00
Fish used for manure and bate :					
Caplan	9,642 bar	at	$1.00	$ 9,642.00	
Smelt	229 "	at	1.00	229 00	
Trout	88 "	at	1.00	88.00	
Lancon	866 "	at	1.00	866.00	
Pike	1,845 "	at	1.00	1,845.00	
Blue fish	702 "	at	1.00	702.00	
Others	3,424 "	at	2.00	6,848.00	
					20,218.00
Seals.					
Sealskins	40	at	$1.00	$ 40.00	
Seal oil	120 gal	at	0.69	72.00	
					112.90
Porpoise :					
Porpoise skin	2	at	$4.00	8.00	
" oil	28 gal	at	60	16.80	112.00
Whale :					
Whale oil. (6)	5,580 gal	at	$ 0.60		3,348.00
					$641 [illegible] 16

These $647,919.16 represent the price of 25,719,479 lbs of fish and 72,891 gallons of oil. And it must be added that 1882 was a bad year for fishing. The following table will confirm the above statement:

	(1879)			(1882)	
Codfish :					
Summer take	101,776 qts	— $407,104		52,101 qts	$231404
Autumn "	31,103 "	— 124,442		86,116 "	— 144,464
	132,879 qts	— $531,516		94,217 qts	— $376,868
Salmon :					
Salted Salmon	14,500 lbs	— $ 870,00		5,405 lbs	— $ 405.00
Fresh "	392,372 "	— 21,379.10		147,408 "	— 10,318.56
	406,872 lbs	— $22,249.10		152,808 lbs	— 10,723.56
Lobster :					
Preserved Lobster	398,648 lbs	— $59,797,20		147,430 lbs	— $36,964 [illegible] 9

These above items show that 1882 was $189,006.24 lower than 1879. In general, the annual produce of the fisheries amount to $800,000 and it would easily amount to a million if more activity was shown in the business.

Moreover, there are many species of fish which the fishermen of Gaspesia do not take, because they do not know how to prepare them for market. The tunny is a very good fish.

According to Dr Fortin, the tunny lives in the waters of Bay

des Chaleurs and in Gaspe bay. It very often atteins the lenght of nine feet and weighs about 500 lbs. Its general lenght is from five to six feet and weighing from 100 to 150 lbs. The meat of the tunny is excellent and resembles veal in taste and color and the breast is considered the best part of it. It is eaten while fresh; it is also salted for exportation and is seasoned with oil or salt. In this state, large quantities are exported from France and Italy.

This fish abounds along the shore of Bay des Chalenrs, and would be an important paying object of exploration. Actually this paying business is going to waste.

The same can be said of the blue fish which is good for eating and easily caught. It takes any bate and its meat is ferm enough to be salted. It is so common that millions of barrels could be taken without any trouble. We will complete the above notesplo giving a few statistics on the number of men and boats employed in the fisheries of Gaspesia.

Vessels	*Number*	*Tons*	*Men*	*Value*
Ships	78	6,709	390	$299,560
Fishing boats	1,612		4,056	81,053
Flat "	1,343			14,837
	3,025	6,709	4,446	$395,450

Drag-lines and nets	*Number*	*Yards*	*Value*
Salmon nets	883	57,902	$18,411
Herring "	3,501	114,032	37,504
Mackerel "	343	8,114	3,169
Mackerel drag-lines	3	150	100
Capelan "	181	8,304	5,993
Lançon "	21	700	829
	4,832	189,202	$66,006

The value of the vessels and tackle mentioned in the above table amounts to the sum of $451,456. That shows the small sum it would require to buy a fishing tackle, which the poorest man could have. The fisheries of Gaspesia could also furnish the necessary stock for an important industry, such as the preparation of artificial manure, which pays well and would be very advantageous to agriculture.

The use of fish in the preparation of certain artificial manures is well known, and practiced for many years on the coasts of Scotland, Ireland, Wales, England and in the United-States. It is in France, that the method of preparing artificial manures with

the refuses of fish, succeeds the best. In the space of thirty years Mr Demolon made an immense fortune in that business. One of his principal factories is at Concarneau, a small sea town in Britany, where, the refuse of sardines which are caught in abundance along the coast, is transformed into artificial manure.

Mr Demolon's method is simple. After having boiled the refuses in copper boilers heated by steam, they are pressed in order to take out the oil and water, then it is scatered out and dried by a current of warm air, when dry ; it is ground. put up into barrels and sold. One hundred lbs of refuses give 22 lbs of powdered manure and 2 lbs of oil. This factory employs—or did employ a few years ago—six men and ten boys who manufactured every day from eighteen to twenty tons of refuses, which made from four or five tons of manure. This manure contains 80 per cent of organic matters and 14.1 per cent of phosphate of lime and magnesia, also common salt, carbonate of lime, sulphate and carbonate of ammoniac and one per cent of water. Azote exclusively exists in the state of organic matter and corresponds to 14.5 per cent of ammonic. In general the refuses of fish produce ten per cent of excellent manure, which is nearly as good and as precious as that of Peru. Half of the weight of the fish caught at Gaspesia is refuse. The following figures, taken from the census of 1881 show the weight of fish caught during that year and the quantity of refuse which could be manufactured into manure worth from $18 to $20 per ton.

Fish	*Bonaventure*	*Gaspe*	*Rimouski*	*Total in tons*
	cwt	*cwt*	*cwt*	
Cod fish	38,112 ..	257,653 ..	5,898 ..	15,083.0
Sharper	69 ..	1,099 ..	83 ..	62.5
Herrings barrels	32,076 ..	76,615 ..	1,943 ..	11,063.2
Haddock "	31 ..	3 ..	6 ..	4.0
Mackerel "	1,259 ..	8,437 ..	647 ..	1,034.3
Sardines "	28 ..	180 ..	380 ..	53.7
Flitans "	6 ..	336 ..	16 ..	30.7
Salmons "	652 ..	479 ..	32 ..	111.2
Shad "	5 ..	6 ..	2 ..	1.3
Eel "	53 ..	112 ..	7 ..	17.2
Trout "	158 ..	122 ..	32 ..	31.2
Other kind of fish barrels	12,934 ..	15,116 ..	1,765 ..	2,981.5
Canned Lobster, lbs	97,200 ..	420,534 ..	....	258.7
				30,732.5

These figures show the net weight of fish ready for market Then we may count 30,000 tons of refuse which would produce

about 6,000 tons of manure worth $20 per ton, and in total $120,000. per year. A great quantity of other fish could be made use of in this line, because they are not considered good for eating. Consequently, we may say that 10,000 tons of manure could be made out of the fish refuse which would produce an annual sum of one hundred thousand dollars.

This business is worth while looking after, and it is to be hoped that before many years, these riches which are going to loss now, will be utilized. The manufacturing of manure pays well as the above calculation has shown; but as it is very hard to find men, in our country, willing to put their money into any new industry, the government should encourage it in giving a few thousands of dollars for the establishment of factories in Gaspesia. The dominion government could not help the fisheries in a better way that in giving, out of the fisheries indemnity, a few thousands of dollars for this purpose. The local government could also lend their hand to this important industry in voting a few thousand dollars, for a few years. The low price at which this manure could be sold to the farmers at the place would encourage them to make use of it and prove to them that artificial manure is realy advantageous. Were it once started, it would not fail to succeed.

CHAPTER VI

FORESTS AND FOREST INDUSTRY

The forests of Gaspesia are very little known, and this is probably the reason why they are not explored. These forests are very rich in all kinds of woods demanded for exportation; such as pine, spruce, birch, elm, ash, cedar &c. Considerable ravages were made by fire, in certain parts of the Matapedia valley, but elsewhere, the forests are still in their natural state and the few trees cut here and there were cut by explorators.

The shipbuilding line, which is intimately connected with the forest industry, could be advantageously carried near the banks of Bay des Chaleurs, where the best of ship-timber can be had, at a very moderate price. "Perley (1) says, the bay shore is naturally endowed with all shipbuilding advantages. The wood is of the best quality and renowned for its durability, especially the red-

(1) *Report on the Fisheries of the Gulf of Saint-Lawrence, by H. M. Perley, Esq., Her Majesty's Emmigration Officer at Saint-John, N.-B.*

spruce, which is considered the best in the world. Mr McGregor, deputy of Glascow and secretary of the board of trade, says in one of his official reports: " The ship built of the red spruce of " Bay des Chaleurs, are remarquable for their durability. In 1839, " I went on board of a ship, in Messina port, which I saw built " in Paspebiac in 1824, belonging to Robin & Co., and which " was unloading a cargo of cod fish, destined to provision the Si- " cilians. This ship, which was more than thirty years built, was " perfectly sound. "

The forests of this region were never explored with the same care as those of the other part of the province, but what the surveyors say of it who have examined the zone neighbouring the shores clearly shows that the Gaspesia is as remarkable for its forests as it is for its fisheries. We will cite a few extracts which will prove the above statement.

The township of Milnikek has been surveyed and explored by Messieurs H- LeBer and P. Murisson, who give the following report :

" The wood which grows on the summits of the mountains and in the plains consists of balsam, white spruce, pine, white and black birch. On the summits of those mountains, there is yet a good deal of building timber, but it is second quality." (H. LeBer.)

" The land is good and slightly sloped near the sources of the Melt and Conners streams ; there is a good growth of red and white birch and a few maple. All the wood fit for commerce was cut, which was the best quality of pine ; but there is still a great quantity of white birch will be employed later on for exportation and other ends." (P. Murisson)

In speaking of Humqui township, M. LeBer says that "there is no pine but plenty of spruce fit for commerce. Cedar abounds all through as well as balsam white and red birch."

T. A. Bradley who surveyed the township of Cabot, in his report says that " there are fertile plains, level and uninterrupted by hills. Hard wood abounds such as white birch, maple and spruce. The latter in particular is in abundance and is much used by the wood merchants of the place. A great quantity of wood fit for saw mills, covers both side of the rivers Blanche and Tartigou. The principal kinds of wood are, spruce, pine cedar, maple, and black and white birch."

Surveyor Garon states that in MacNider township which is

crossed by the Tartigou, "the wood is of a good quality particularly the maple and birch which constitute the principal species. Pine is very rare, but there is still a large quantity of thipping spruce. The cedar is abundant and of the best quality.

According to Grondin's report Tessier township is "level and covered with the very best of wood such as birch, maple, elm, ash, spruce." This township is watered by the Matane and is behind the seignory of the same name.

"The species of wood whichabound in Tourelle township, says the surveyor are balsam, aspin birch, spruce aud cedar. There are small quantities of maple. The cedar is not in abundance but is of the best quality. We have met with several fine pine stumps; I do not remember of having seen any standing.

In the township of Fox River, Cape Rozier, and North Gaspé, especially in the valleys, the land is level, wooded with maple birch, and ash, but the latter species is somewhat rare, on account of the number of fish barrels made of it.

The forest of Fortin township are composed of spruce, balsam and birch. In Rameau township, which is watered by the Grande River, there is a little quantity of pine, a great quantity of cedar and maple. The birch, which is generally sound and of a remarkable thickness, is scattered here and there with white birch, balsam and spruce. The cedar, in particular, could furnish a good deal to exportation. There are abundances of wood fit for commerce in the Pabos forest. There has been some pine cut in the forest near the shore; but there is yet in the interior, plenty to supply ships for many year.

We still find, in the first ranges, abundances of wood for shipping, such as cedar, spruce, balsam, birch and ash. The birch is large, very sound and constitutes a first class article for exportation. Surveyor Legendre explored a considerable part of the region drained by the Pabos and Port Daniel and we extract the following notes from his report.

"From New River to Fourches, there is a great quantity of shipping timber: cedar, poplar and elm. These tree are generally tall, thick and of a good quality. The summits of the hills are generally wooded with birch and soft-wood, I saw birch trees that would make square logs of 30 feet long and 20 inches square. These woods have already been culled, but there still remain enough of birch, pine and spruce to prove the value of the land...

" The Samaragne is the best water power. Balsam and spruce abound and the access is easy. "

The same surveyor explored the Bonaventure and Gaspesia and gives the following account of the forests:

" The wood, which is generally (in the valley of little Cascapedia river,) cedar, birch, aspen, spruce and balsam, is remarquably thick and in abundance. I saw several cedars whose circumference were from eighteen to twenty feet and sound. From Fourche to the thirty second mile on the east side, there are many spruce, cedars and poplar.

" I have also remarked that the swamps in this region are thickly covered with soft wood...

" As for the remainder of the branch south west of Fourches, there is no wood of any importance, but behind New-port townships, we find abundance of cedar and poplar on the river sides, and pine and spruce on the heights and along the rivers. "

River Hall (one of the affluents of the Bonaventure) is well bordered with birch, pine and spruce, as well as the Pasbos. "

A great part of the Bonaventure was explored by Mr H. O'-Sullivan, who is a competent surveyor. The following notes were taken from his report :

"... The first western branch, where pine, balsam, spruce and cedar abound.....

" On the 2nd and 3rd mile, square timber has been made. Along the river, as far as the 2nd mile post for a long distance on the western branch, there are splendid farms whose extent is about ten thousand acres. The valleys are well wooded with spruce, pine, balsam and poplar and on the heights, there are white spruce and a few pine and birch.

" The Bonaventure cedar deserves a special mention : I have not seen its equal in size and quality throughout the Dominion. There are also a good deal of pine, spruce, balsam and poplar and according to the accounts of explorators and chanty men who visited the sources of the rivers Hall, Duval and Creuse, maple and birch abound in these localities.

Before going further let us state that the finest forests of Gaspesia are in the valleys of Bonaventure. There are large pines, spruces and cedars, which cedar Mr O'Sullivan, considered the best of the Province. There are pine trees in large quantities enough to make millions and millions of feet of square timber. Some of these trees have measured four feet around the but. The spruce, birch and cedar would also make thousands of square feet. And

these beautiful woods are not only in the principal valleys but also in the secondary valleys of the rivers affluents, which clearly shows that these rich forests cover an immense extent and can furnish one of the richest and greatest forest explorations in the province. This exploration could be made on the most advantageous footing that could be thought of. In ordinary explorations, the transport of provisions for the wood-cutters and horses used for hauling out the wood, several hundred miles from any central place, through regions where the roads are mountainous and rocky, is very expensive. But these inconvenients and expenses have nothing to do with the exploration of the forests of Bonaventure valley, because the roads are easily made on the rivers which are frozen during the winter season. Then the distance from the sea is not more than thirty miles to the center of the woods.

That is nothing to the distance of same shanties in the province. Thus, in upper chanties of the Ottawa, were the greatest part of the pine which is imported, is made, the provisions are carried from 200 to 300 miles. Nevertheless, the companies that explored these forests, made large fortunes. What would their fortunes have been, if there work could have been done as easily as on the Bonaventure valley, a few miles distant from where provisions can be had at a very low rate and transport them to the chanties for a mere trifle !

Finally, the bringing down of the timber, on slides &c., which costs so dear on the Sagnenay, the St-Maurice and the Ottawa, would be comparatively nothing on the Bonaventure. Here, such things as slides and boat-men are not required; because the river is not obstruated by an obstacle. " Allow me to remark, says Mr O'Sullivan, who explored the river from its source to its discharge, that along the river, from the sea-shore to the furthest lake, (a distance of 52½ miles from the sea) there is not a fall; but, to the contrary, a strong current which is far from all obstacles."

It is impossible to imagine a more propicious river for lumbering. No falls, but a natural and rapid current. It suffices to throw the logs into the river and they float down themselves. In such favorable circumstances, ten men can do as much work as a hundred and more on rivers less advantageous. Finally the inlet of the river forms a dock where ships can be loaded with wood and sheltered from the winds and all other obstructions which are met with in other parts not so well situated. The

above clearly shows that, in every point of view, the forests of Bonaventure valley are exceptionally advantageous. All these reasons plead in favor of the Bonaventure valley and its neighbourhood. Undoubtedly, it is one of the finest forest regions of Gaspesia and perhaps in all the province.

There are also beautiful forests in the valley of the Nouvelle river. Surveyor Murison gives the following description of it :

" The soil of this locality (20 miles from the mouth of the river) is good and closely wood with the best of timber, especially spruce, which would serve well for shipping. In the environs and between the 9th and 10th mile up, there are pine trees of the best quality which grow on the declivity of the mountains and on the hind of the hills along the river, The streams which empty their waters into the main river are small. There are also birch and poplar trees. Excellent building timber abonds along the declivity of the mountains. "

In Mann township, the soil is perfectly level, good and covered with birch and maple of an immense size. The great valley of Busteed stream is wooded with pine and birch ; the size of the latter is enormous. The principal species are elm, ash and birch. There are some ash trees that are as tall and as thick as pine. As you advance towards the interior the wood and soil seems better,

According to the report of surveyor Legendre, it is easy to judge the qualities of the soil and forests of Ristigouche township in particular of the second range :

" The different species of wood which I met on the survey are of the best quality, the soil is also very good, and according to the account of travellers, the entire extent, as far as the exterior north line, is covered with very good timber. I never saw any place that could rival with this part of the second range. The birch trees which abound are very big and perfectly sound. There are spruce trees which measure sixteen inches in circumference at a distance of sixty feet from the stump. The soil is of yellow earth and the best I ever saw. Amongst the other trees which I mentioned, grows the cedar which is a sure sign of good land.

This township, as well as that of Metapedia was carefully explored by Mr. W. A. Sims. Here are a few notes from his report :

"The township of Ristigouche is situated at the head of the tidal current of the Ristigouche, which borders it on the south. The land is a good quality of yellow soil which is free from stone and lies on beds of trapp, which,, by decomposition, makes good

and fertile earth. It is well wooded with black and yellow birch, maple, white birch, balsam, spruce, beech and ash. The latter wood grows, on the declivity of the hills, amid pine and cedar. The extend of the bottom of the valley is very small. The timber that grows in these plains is generally soft and sometimes mixed with ash and elm. The description of Metabodia is the same as that of Ristigouche."

The above details, which are taken from the most authentic sources, clearly show that the forests of Gaspesia, particularly those of the region bordering the Baie des Chaleurs, between the St. John and the Metapedia, are as rich in shipping timber as those of the St. Maurice, the Saguenay and the Ottawa. There is timber enough in the forests of Baie des Chaleurs, to furnish the shipping business for many years. It is the only place in the province where good and large cedar is to be found. The ash and elm trees grows to an enormous height.

The exploration of the forests are very easy and less expensive than in any other part of the province.

Moreover, they must make the timber at five six and sometimes seven hundred miles from which it is put on board of the ships which bring it to Europe. In Gaspesia the furthest forests are not more than a hundred miles from the sea shore. This is a great advantage. There is an other still greater. The water courses, through which the timber pass, in other parts of the province, are intercepted in many places by rocks, cascades, which render it impossible for the timber to come down alone, and to avoid these obstacles, slides and other expensive amelicrations have to be built. There is nothing of all that in Gaspesia; the forests are crossed by rivers whose currents are strong, but do not empeach the floating of the timber. It sufficies to put the logs in the water and it floats down. Then the transport to England is less expensive than at any other port in Canada. Besides they have five hundred miles less to travel, that is about a thousand miles less in going and coming, and the ships that enter the lower ports of Gaspesia have nothing to pay for wharfage, pilotage and all these expenses that amount to a considerable sum in other places. The navigation is often for a month longer than in the St-Lawrence.

All the considerations clearly show that the forest industry of Gaspesia is advantageous; if it has not been explored on a high scale, it is because the richess of these woods are unknown. But that ignorance will soon disappear and the lumbering business,

which will give millions, will commence in Gaspesia. Before 1840, nobody knew that there was any timber in Saguenay district. And now it furnishes a large quantity to the shipping business. The Price firm transformed Saguenay, and it is to be hoped that some enterprising man, like the Honorable J. Price, will explore and transform Gaspesia.

CHAPTER VII

AGRICULTURAL INDUSTRY

For the richness of its soil and the mildness of its climate, Gaspesia is one of the nicest parts of the province. The seaweed and the refuse of fish which cover the sea-shore, is the very best manure, and it is easy to catch immense quantities of fish that are not eatable, but that can be used as land renewators.

The sea-shore clay and sea-weed are universally known as the best manure. The sea-weed is generally used as trap dressing for the meadows and gazing fields, its makes the strong and succulent grass which the cattle greedily devour. It is also advantageously used on corn and flax fields, it makes the grain larger and flax easier spun. The sea shore mud formed by fish shells and organic and vegetable decompositions, which all intelligent farmers along the coast, put on their meadows, is the best manure for corn and potatoes.

The rotten fish, their scales, entralls &c is the very best manure for the localities which are near the sea shore. These substances abound in Gaspesia, especially on the shore of Bay des Chaleurs. After every tide, the strand is covered with loads of sea-weed and dead fish. This is not only during the spring and autumn, but also during the entire year. The farmer who gathers hese refuses and puts them on his fields has abundant crops. The cattle like the saltish taste that this sort of manure gives to the grass and wherever the sea-weed has been sown the grass is closely eaten down.

Shell fish gives very good manure when mixed with the seamud.

But the richest manure is made off fish and their refuse. Every codfish establishment can furnish enormous quantities of this manure which can be ploughed into the land in a crude state. If the farmers of Gaspesia know the value of these refuses, they would topdress their meadows with them, and in a few

years would be independant. Were they to boil their refuses and take of the oil which is injurious to vegetation, the manure would be better. The fish, as they are caught or found on the sea-shore, make excellent manure. All fish that is not eatable, such as small herrings which are to thin for eating are used by the farmers for their meadows. Millions of barrels are used every year in this way, but millions more could be used were all the fish that is not fit for market is caught. Finally the sea furnishes the inhabitants of these localities with the richest and best vegetable and animal manure that can be had.

We have already said something about manufacturing manure with the scales of fish. If ever this precious industry will be established in Gaspesia. the farmers will have an other source of acquiring wealth, because this manure is as good as that which the farmers of England and France find profitable, while they pay more than $20.00 per ton, to merchants who import it from South America.

Chalk is an other source of manure which the inhabitants of Gaspesia can easily procure. There are immense quarries of it in the Madeleine islands, which are, comparatively in the neighbourhood of Gaspe, when considered to the other parts of the province. The transport can be made cheaper, what gives a great advantage to the people of the coast.

There are deposits of marl clay in many places of Gaspesia. It is also an agricultural source of richess. Marl is well known of possessing the qualities of manuring and making the soil better. It physically acts on the soil in making it ferm, and at the same time the carbon which it emits, contributes to the nourrishment of plants. In France (where it is very much used) it is considered as the most precious and valuable renovating substance for soils. It has been prouved by men of experience that a mixture of marl and manure makes the land yield a double crop. The farmers of Gaspesia who have manure in abundance, are evidently the best situated to profit of these marl deposits to ma ke their soil better, whilst it is naturally fertile.

Then we can fearlessly declare that, as for first class manure, the transport of which costs nearly nothing, the farmers of Gaspesia have advantage that cannot be had in any other part of Canada.

It is well known that the climate is favorable to agriculture purposes. Nevertheless, the south part of the peninsula of Gaspe enjoys an advantage which is not generally known, that is

its southern situation. From the chain of mountains which border the St-Lawrence, the land is slightly inclined to the south and is thus exposed to the rays of the sun which are so important to vegetation, to which they impart an extraordinary activity. The rays of the sun loose part of their heat by refractration, and this is the reason why the agricultural temperature of New-Brunswick and the other side of Bay des Chaleurs is not as high as in Gaspesia, where the rays of the sun fall perpendicularly on the soil and give it more vegetative strenght.

In consequence of the south zone of Gaspesia being exposed to the sun, it is considered the most advantageous for orchards and vineyards. With the care of an intelligent farmer, the apples would grow as large as they do in Montreal where the summer is not longer, and there are places which appear to be naturally destined for fruit trees. Among many other places, allow me to mention the declivity which is between the sea and mount Tracadigetche, in Carleton. The soil is naturally suitable for orchards, the flank of the mountain which breaks the north wind, reflects the rays of the sun and rises the temperature, then the sea breeze regulates the thermometer and thus prevents sudden changes and early frost. This locality is equal, if not superior, to many places of the Island of Montreal, where apples and grapes are cultivated since many years with success. When we will cultivate orchards in Gaspesia, particularly in Carleton, it will be seen that the result will be good.

The soil is so rich that it will produce excellent crops, without any manure. The land is made up of the remains of rocks, which makes the best and the richest soil. These black and brown clay soils are easily cultivated and produce abundant harvests of wheat, corn &c. The following figures show the truth of the above statement.

The extent of cultivated land in Gaspesia is 174,306 acres. The area of the different branches of culture is as follows :

	Bonaventure	*Gaspe*	*Rimouski*	*Totals*
In Corn.....	30,159 ...	21,932 ...	32,923 ...	85,014
" Hay.....	12,609 ...	10,616 ...	10,472 ...	33,697
" Grazing.....	11,297 ...	14,415 ...	28,678 ...	54,390
" Vegetables.....	594 ...	443 ...	168 ...	1,205
Total	54,659	47,406	72,241	173,306

The extent sown in corn gives the following figures :

	Bonaventure	*Gaspe*	*Rimouski*	*Totals*
Bushels of Wheat.....	35,839 ...	28,742 ...	89,625 ...	154,206
" Barley.....	31,932 ...	46,952 ...	63,921 ...	142,805
" Rye.....	5,529 ...	6,609 ...	8,964 ...	21,092
" Buckwheat..	64,446 ...	1,552 ...	7,713 ...	73,711
" Indian corn	327 ...	101 ...	50 ...	478
" Oats.....	194,570 ...	87,551 ...	71,705 ...	353,826
....	332,643	1[illegible]	241,968	746,118

Vegetables				
Bus. of Potatoes,.....	704,432 ...	423,591 ...	263,327 ...	1,391,353
" Turnips.....	101,490 ...	114,561 ...	12,243 ...	228,294
" Carrots &c.....	31,753 ...	13,493 ...	1,623 ...	46,869
" Beans.	2,527 ...	6,172 ...	29,046 ...	37,745
Total.....	840,202	557,817	306,239	1,704,258
Tons of Hay.....	16,891 ...	17,169 ...	7,702 ...	41,762

The average of wheat produced per acre :

	Bonaventure	*Gaspe*	*Rimouski*	*Gaspesia*
Bushels treshed.....	35,839 ...	28,742 ...	89,625 ...	154,206
Acres sown.....	3,181 ...	2,610 ...	9,482 ...	15,073
Produce per acre.....	11.26 ...	1[illegible] ...	9.10 ...	10.23
" " 1871.....	11.9 ...	[illegible] ...	8.3 ...	11.7
Difference.....	— 0.64	— [illegible]	0.80	—1.47

That is to say that from 1871 to 1882, the produce of wheat per acre, increased 0.80 in Rimouski county, diminished 0.64 in Bonaventure county, 3.19 in Gaspe and 1.47 in all Gaspesia.

The produce of hay per acre was as follows, according to the census of 1881 : in Bonaventure county 1.33 tons; in Gaspe county, 1.61 tons; in Rimouski county, 0.73 tons; in all Gaspesia, 1.23 tons. This produce is not very great; but this is due to the cultivation and not to the soil. In several places they follow the custom of making meadows without sowing hay seed and then let them run out. It is well understood that in following such a system, it is impossible to harvest much hay, even when the land is good.

The potatoe harvest is most abundant. The produce, per acre, is 152.21 bushels in Rimouski; 156.07 in Gaspe; 183.11 in Bonaventure. This is easily explained. The soil is good and the fish manure, which the farmers use, makes the land produce twice the quantity. They use herring and other fish of inferior quality

which are put in the drills. This manure makes potatoes grow in land that is barren by nature and undoubtedly, when it is used in fertile soil, the produce must be better. Therefore it is easily explained how 8,291 acres of land produce 1,704,268 bushels of potatoes. In supposing potatoes to be worth no more than 15 cts per bushel, this harvest would amount to $255,637.70 or $30.83 per acre.

The following list will show the different crops which are cultivated on the above number of acres.

Cultivation	*Bonaventure*	*Gaspe*	*Rimouski*	*Gaspesia*
Hay	12,609	10,616	10,472	33,697
Wheat	3,181	2,410	9,842	15,433
Potatoes	3,847	2,714	1,730	8,291
Other vegetables	23,131	16,808	21,351	61,290
Total	42,768	32,548	43,395	118,711

The following proportions show the different cultures of Gaspesia : hay, 28.48 per hundred ; wheat, 13 ; potatoes, 6.99 ; other grains and vegetables, 51.63. It is evident that the hay culture is not high enough and that it should be augmented, at least, 12 or 15 per 100. Raising cattle pays the best in our country, and to do so with profit, at least 40 per cent of the cultivated land should be left in meadow. Otherwise, the farmer has not enough of hay to fodder a herd of cattle. In taking the above advise, the raising of cattle would pay in Gaspesia.

Moreover, there is not a county in the province as well adapted for grazing. The pastures are rich. The soil produces the very best grass, and the meadows are meandered by streams and rivers whose waters are limpid. The hills and heights are covered with good grass for sheep and the temperature of the climate gives strenght and health to the cattle. Finally, the ease with which large quantities of potatoes can be cultivated, allows the raiser abundant fodder for his cattle. And the exportation of cattle has been made easy by the Intercolonial Rail Road, which has put Bay des Chaleurs in communication with the principal sea-port towns of Canada. When the western farmers find it advantageous to raise cattle and send them sometimes more than 800 miles to the Chicago market, would not the farmers of Bay des Chaleurs have the same advantages in raising cattle and exporting them to Halifax, St-John and Quebec, that are not more than 400 miles distant? It must be admitted that the farmers

of Gaspesia do not raise enough of cattle. This will be clearly seen by the following table which is taken from the census of 1881:

Cattle	*Bonaventure*	*Gaspe*	*Rimouski*	*Gaspesia*
Horses	2,272	2,320	1,412	6,004
Foals	518	430	305	1,253
Working oxen	436	1,818	353	3,607
Milk cows	5,053	4,996	3.906	13,955
Other bovine cattle	4,611	4,299	3,635	12,545
Sheep	15.030	19.468	11,827	46,325
Pigs	7,428	9,448	4,061	20,937
Total	36,348	42,779	25,499	104,626

In Gaspesia, there are 173,101 acres of land under culture and pasture, which gives 1.64 acres for each head of cattle and 1.84 head of cattle for each person, because the population is 58,850. In Compton, one of the richest counties of the province, and which ows its riches solely to agriculture and particularly to raising cattle, there are 147,874 acres under cultivation and pasture, and 46,721 head of cattle, which makes 3.16 acres per head and 2.38 head of cattle for each person, knowing the population to be 19,581.

As we can judge by comparison, there are 100 per 100 more cattle in Compton than in Gaspesia, which easily explains the riches of the one and the poverty of the other.

An other comparison will make the thing clearer.

According to the census of 1881, the value of the milk produce amounted to $147,851.80 in Compton; in the county of Bonaventure $52,679.90. Consequently, there exists a difference of $80,245.77 between the milk produce of the two counties. On the same average, the difference in favor of all Gaspesia, where the land is as good and even better than that of Compton, would be $268,379.20.

All these facts clearly prove that the farmer of Gaspesia would double his profits in raising cattle. This demonstration would not have an immediate effect on the inhabitants of this region; but it shows to immigrants who would like to settle down there, that in cultivating the land as it should, it would produce as much as that of the eastern townships which are so well known for their agricultural riches.

CHAPTER VIII

CLIMATOLOGY—ASTRONOMICAL SITUATION—THE WINDS—THE SEASONS—MEAN TEMPERATURE—LENGHT OF THE AGRICULTURAL SEASON—SNOW—RAIN

We have already seen that Gaspesia is situated between 47 ° 49' and 49 ° 15' north latitude. The north of France, the valley of the Loire, the north of Switzerland and Austria, the south of Germany and the north of Russia as far as the Caspian and Dead seas, are on the same latitude. That is to say that this latitude comprises all the central and the richest as well as the most inhabited part of Europe. The British Islands, a part of France, Belgium and Holland, the greatest part of Germany and Russia, Danmark, Sweeden and Norway are north of this latitude and have a lower temperature than that of Gaspasia.

In a climatological point of view, the latter region occupies a portion worthy of remark. The sea that surrounds it on three sides regulates the climate and attenuates the variations of cold and heat. Even the nature of the different parts divides the peninsula of Gaspe into two distinct climatological townships; that of the north and south. The northern region, more or less exposed to the cold blast and to the neighbouring cold waters of the Labrador and the ice that enters into the north east of the gulf by the strait of Belle-Ile is a little colder than that of the south. This does not hinder it from enjoying as warm a temperature as that of the most populated places of Scotland and from being warm enough to ripen corn, and particularly wheat, which grows in abundance in the region neighbouring the gulf of St-Lawrence. The southeastern region is somewhat warmer and, as regards agricultural operations, far superior to that of Great Britain and Ireland. Indian corn, which cannot be cultivated in England, on account of the temperature, grows very well in Bonaventure county, where hundred of bushels have been harvested in 1881. Protected on one side by the mountains of Notre-Dame and Shickshock against the north wind, exposed on the other side to the warm breeze of the south, which takes part of its heat from the gulf stream upon which the rays of the sun fall perpendicularly ; in fact, nature seems to lend her hand in making this place the most healthy and most agreable in the province. Indeed, to appreciate Bay des Chaleurs, one should breath the pure and healthy breezes of this interior sea, which is called the Me-

diterranean of Canada. The climate is so pure and so healthy that sickness is unknown. There are four doctors dispersed among 39,593 souls who inhabit the counties of Bonaventure and Gaspé and they can scarcely make their living by their profession.

The northeast wind, which is so cold, damp and disagreable in the St-Lawrence valley, is not at all felt on the banks of Bay des Chaleurs; it is broken by the mountains and completely neutralized by the warm air coming from the south. But, what is most worthy of remark in this region is that the rain and snow are not of long duration and when they last a day it is considered extraordinary, especially in summer. The southeast wind resembles the sirocco of the Mediterranean which is damp, warm thin and rapid. When it appears in winter, it causes thaws, particularly in the equinoxial season. The due south wind, which one would believe to be warmer than the southeast, is more moderate. During the season that it is most frequently felt, it is considered as an agreable and refreshing breeze, on accouut of its humidity. The south western wind is most frequently felt during the summer. It is only towards mid-summer that it reigns in a constant manner. It becomes the principal agent of storms which break forth in the months of July and August. Often the south breeze which is accustomed to rise about ten or eleven o'clock in the morning, is displaced by the southeast which, on the afternoon, covers the sky with clouds, the thunder rools and the lightening flashes during the afternoon and towards sunset rain falls in torrents. The autumnal equinoxe brings a change in the currents of air and it is then that the easterly wind reigns during forty day; after this period the south west rises and during the remainder of the season alternately reings with the north west which is the most serein and most agreable of this region. It is the south west that melts the snow, towards the twentieth of April; it is also it that brings the rain at certain epoches in spring and autumn. It is well known that this wind comes from the tropic, nevertheless it is deviated and modified, but naturally warm, which explains why it raises the temperature.

The north western wind is essentially cold, dry, impetious and more frequently felt in winter than in summer. Whenever the north west is spoken of in Bay des Chaleurs as well as in all the other part of Europe that borders the Atlantic, it is known as a cold, damp but healthy breeze. It is so perfidious in

winter, that when the shining sun and pure sky invite us to breath the fresh air, if we leave our rooms we are seized with a glacial blast which makes tears come to the eyes ; not so cold in summer, it is wished to calm the violence of the heat and it happens very often, to show itself after a rain storm.

The two reigning winds in Bay des Chaleurs come from the west and east.

The succession of the seasons is regular. The influence of the sun begins to be felt towards the end of February. It gradually rises in March and from then the mercury generally rises every day above freezing point. During this month, the mean temperature of whic varies from 17° to 20°, the weather is generally very fine, the sky is clear and the sun shines ardently. The thaw regularly commences on 20th and the snow rapidly disappears. In April, the solar heat is strong enough to exercise its influence on all nature. The snow disappears in many places before the 25th and a few days after the land is fit for cultivation. The mean temperature of this month varies from 30 ° to 36 ° . There are a few days of snow and rain. The snow is completely gone about the seventh of May and high and well drained ground can be sown. The mean temperature of this month is from 40 ° to 50 ° and the number of raining days are not numerous ; they did not exceed more than eight in 1881. Vegetation developes itself with an extraordinary force, and towards the end of the month, the green leaves, the spring flowers and the grain which begins to cover the fields with verdure seem to announce the beautiful season.

In 1880, the mean temperature of the three months of spring was 48 ° 1 at Carleton and 48 ° 2 at New Carlisle. The following table is formed by a comparison of these figures and those of the mean temperature in some of well known places in Europe

Localities.	*Spring Temperature.*
London, England	47 ° 6'
Liverpool "	46 ° 2'
Glasgow, Scotland	45 ° 9'
Edimbourg "	45 ° 0'
St. Petersbourg, Russia	35 ° 9'
Berlin, Prussia	47 ° 4'
Paris, France	50 ° 6'
New-Carlisle Bay des Chaleurs	48 ° 2'
Carleton " "	48 ° 1'

This table whose figures are taken from Blotgett, for the towns of Europe, and from the report of the Meteorological Board of

Canada in 1880 for Bay des Chaleurs, proves that the mean temperature of spring is higher and warmer than that of London, Liverpool, Glasgow, St. Petersburg, Berlin and is but 2 ° 4 lower than that of Paris. The variations were as follows during these three months :

	Highest Temperature.			*Lowest Temperature.*		
	March,	April,	May	March,	April,	May
New Carlisle	38 ° 5'	59 ° 5'	73 ° 5'	—15 ° 0'	5 ° 0'	24 ° 0'
Carleton	39 ° 0'	58 ° 0'	77 ° 5'	—20 ° 0'	1 ° 5'	19 ° 5'
Pointe-au-Père	35 ° 0'	57 ° 8'	67 ° 2'	—17 ° 5'	4 ° 9'	12 ° 0'

The number of rainy and snowy days as well as the quantity fallen are as follows :

	SNOW						RAIN					
	March		April		May		March		April		May	
	ds	*in*	*ds*	*in*	*ds*	*in*	*ds*	*in*	*ds*	*in*	*ds*	*in*
New Carlisle	4	6.0	2	traces	0	0	0	0	1	0.48	8	2.10
Carleton	6	9.0	4	1.5	0	0	0	0	6	1.64	10	3.19
Pt-au-Père	11	6.0	6	15.5	3	2.2	0	0	9	2.42	16	2,64

The last frost was on the 14th of May in Carleton ; it was very slight, as the thermometer only went down to 24 °. At New Carlisle on the 8 of the same month, the thermometer was down to 24 ° 8'.

The summer heat commences with the month of June. During the first days of this month the thermometer is lowered by the easterly winds, which bring with them the cold air of the polar current or of the icebergs which float during the season on the banks of Newfoundland. This has no other effect than that of rendering the weather a little cold and damp and lowering the temperature to 35 ° 8', (on the fourth of June 1880). After the 4th, the heat gradually increases until it reaches 70, about the 15th and 80 ° or 82 ° towards the end of the month, and in the highest temperatures, about 58 ° or 60 ° as mean temperature. The months of July and August, the finest of the year, are very warm, the highest temperature being between 80 ° and 90 ° and lowest about 40 ° which does not happen very often. The highest temperatures vary from 50 ° to 55 °. The mean temperature of these three months is as follows (1880).

	June	*July*	*August*	*Summer*
New-Carlisle	60.8'	69.8'	65.5'	64.7'
Carleton	58.6'	65.1'	60.6'	64.7'
Pointe-au-Père	54.7'	57.5'	56.6'	54.7'
Cap-Rosier (1)	51.4'	58.5'	56.8'	55.6'
All Gaspésia	56.4'	62 7'	59.9'	59.4'

(1) The figures for Cap Rosier apply to the year 1871-72.

In comparing the temperature of the above place with that of other well peopled places in Europe, we form the following table :

Localities	*Spring Temperature.*
London, England	47 ○ 6'
Liverpool "	46 ○ 2'
Glasgow. Scotland	45 ○ 9'
Edimburg "	45 ○ 0'
St Petersburg, Russia	35 ○ 9'
Berlin, Prussia	47 ○ 4'
Paris France	56 ○ 0'
New-Carlisle, Bay des Chaleurs	48 ○ 2'
Carleton " "	48 ○ 1'

That is to say that the summer temperature of Bay des Chaleur is the same as that of Berlin and Paris, but is from 30 ° to 70 ° higher than that of the principal towns of England, Scotland and Russia.

The extreme temperatures were as follows :

	Highest			*Lowest*		
	June	July	August	June	July	August
New Carlisle	83 ○ 5'	84 ○ 5'	90 ○ 5'	35 ○ 8'	40 ○ 4'	38 ○ 8'
Carleton	86 ○ 5'	87 ○ 5'	90 ○ 5'	35 ○ 5'	44 ○ 0'	39 ○ 0'
Father Point	83 ○ 1'	74 ○ 7'	82 ○ 7'	37 ○ 0'	46 ○ 1'	42 ○ 1'

The daily variation of the temperature is from 20○ to 40○ and very seldom passes these figures. In Bay des Chaleurs, particularly, the regularity and uniformity of the barometrical oscillations, during the summer, show the delicious temperature of the season. The northeasterly, or northern winds are never felt ; that of the north west, which rises after storms, is dry but not cold, and does not act on the barometer. The other winds that come from the sea are mild and do not effect the thermometer ; they agitate the air, and make it somewhat cooler and in fact delightful. It is precisely that which makes the weather so agreeable in summer.

It does not rain much during the summer, as the following table will show :

NUMBER OF WET DAYS AND THE QUANTITY OF RAIN

	June		July		August		summer	
	ds	*inc*	*ds*	*inc*	*ds*	*int*	*ds*	*inc*
New Carlisle	4	0.15	19	3 04	7	1,58	24	4.77
Carleton	6	1.95	12	2.82	9	2.64	27	7.41
Father Point	7	1.21	12	2.20	8	1.15	27	4.56
Cape Rosier,	14	5.71	13	3.17	7	2.66	34	11-54
Gaspesia	7¾	22.5	12¼	2.81	7¾	2,01	28	7.07

The number of raining days during the summer months is not more than 30 per ct. And this number includes not only all the raining days but also the days on which it rained no more than five minutes. During the same season, it rained on 53 days in Montreal and 51 in Quebec. and there fell 9.62 inches of rain in the former city and 11.46 in the latter. Consequently, the summer is not as wet in Gaspesia, principally in the region of Bay des Chaleurs, as it is in the parts of the province which are towards the west.

The first days of autum are delicious. The temperature lowers as the month of september advances, but never goes down to freezing point. The highest temperatures vary from 70° to 80° at the beginning of the month and from 35° to 40° towards the end. The weather is generally calm, cool and agreeable and best for field labor. It is during this month that the harvest is finished. After the equinox. the south eastern and north eastern winds bring storms of rain which soften the soil for ploughing. The coolness of the rain prepares the frost which begins about the middle of october.

During this month the thermometer never goes down lower than 24 ° o, and that very seldom happens during the latter days of the month. The potatoes are dug during the fine days of the beginning of October. In the regions of Father Point and Cape Rosier on the gulf St-Lawrence, there are a few snow storms between the 20th and the 25th of October, but it is soon melt and makes the land fit for ploughing. Then a period of fine weather follows, with an exceptional fall of snow, until the 21st of November, when the winter sets in. This period of fine weather is called by the inhabitants the Indian Summer. All Europeans especially the English, who have spent the season at Bay des Chaleurs, declare that it is the finest that can be imagined. Captain Murison says that the autumn cannot be equaled by any place in Europe. The temperature of September and October is the same as that in England; but in November the season which is on the decline, is like a dying lamp which now and then throws out a bright light. This is what we call the Indian Summer. Sometimes it lasts but a few days, but in general about three weeks. During these days or weeks, the atmosphere has a smoky color, as if there were fires in the woods. The sun throws but deadly light and its rays somewhat refracted, scarcely make a shadow. The air is generally calm and as warm as the first days of the month of May.

The mean temperature of the three autumnal months is :

	September	*October*	*November*	*Autumn*
New-Carlisle	58° 8'	46° 1'	27° 7'	43° 2'
Carleton	54° 7'	42° 4'	20° 7'	39° 3'
Father Point	49° 8'	41° 2'	26° 9'	39° 3'
Cape Rosier	50° 3'	39° 9'	27° 7'	39° 3'
Gaspesia	53° 4'	42° 4'	25° 8'	40° 5'

Let us compare this autumnal temperatures with those of the principal towns.

Localities	*Autumnal temperature*
London, England	50° 7'
Liverpool "	49° 1'
Glascow, Scotland	49° 0'
Edimburg "	47° 9'
St-Petersburg, Russia	40° 3'
Berlin, Prussia	49° 2'
Paris, France	52° 2'
New-Carlisle, Bay des Chaleurs	43° 2'
Carleton " "	39° 3'

In taking New Carlisle as a point of comparison, the autumnal temperature of Bay des Chaleurs is 7° 5' higher than that of London, 6° lower than that of Liverpool, Glasgow and Berlin, 4° 7' lower than that of Edimburg and 2° 9' higher than that of St. Petersburg, the capital of Russia.

The extreme temperatures are shown in the following table :

	Highest			*Lowest*		
	September	October	November	September	October	November
New-Carlisle	84° 5'	63° 5'	63° 5'	33° 1'	23° 3'	— 7° 5'
Carleton	81° 5'	61° 0'	61° 0'	37° 0'	24° 0'	— 1° 0'
Father Point	70° 2'	62° 3'	56° 7'	31° 3'	26° 0'	— 3° 2'
Cape Rosier	64° 0'	51° 0'	42° 0'	40° 0'	30° 0'	—10° 0'

The number of rainy and snowy days as well as the quantity of rain and snow fallen during the season is shown in the following table :

	RAIN						SNOW					
	September		October		November		September		October		November	
	ds	*inc*	*ds*	*inc*	*ds*	*ine*	*ds*	*inc*	*ds*	*inc*	*ds*	*inc*
New Carlisle	11	3.80	5	2.89	3	0.77	0	0.00	0	00.0	4	9.0
Carleton	12	5.80	13	4.78	2	0.69	0	0.00	0	0.00	7	11.5
Father Pt.	20	4.52	16	4.77	2	0.07	0	0.00	3	I 80	8	20.2
Cape Rosier	7	1.40	12	2.68	7	1.61	0	0.00	0	0.00	7	4.2
Montreal	17	2.83	17	4.44	8	36.30	0	0.00	5	3.10	15	12.7
Quebec	19	4.72	19	6.35	6	1.49	0	0.00	4	1.20	15	28.1

This table clearly shows that less rain and snow falls in Gaspesia during the fall than in Montreal and Quebec. In taking New Carlisle as a point of comparison for all Gaspesia we find the following difference :

	Rainy days	*Quantity of rain*	*Snowy days*	*Quantity of snow*
Montreal.....	42 days	43.57 inches	20 days	20.80 inches
New Carlisle.....	19 "	7.46 "	4 "	9.00 "
Difference.....	23 "	36 11 "	16 "	11.80 "
Quebec	20 "	15.80 "	19 "	29.21 "
New Carlisle.....	19 "	7.46 "	4 "	9.00 "
	1 "	8.34 "	15 "	20.21 "

That is to say that during the three months of autumn, there were 23 rainy days, and 36.11 inches of rain, 16 snowy days and 11.80 inches of snow more in Montreal than in New Carlisle. And we state this in a particular manner for those who do not believe that Bay des Chaleurs is warmer than Montreal which is evidently the finest part of the province of Quebec.

The thermometer fell lower than freezing point for the first time, on the following dates, at Carleton, 23rd september, 29 ° 5' ; at New Carlisle, 2 October, 31 ° 1 ; at Father Point, the 25th of October, 31 ° 3' ; at Quebec, the 14th of October,, 31 ° , at Montreal, the 20th of October. The first frost is felt but a few days sooner at Bay des Chaleurs than at Quebec and Montreal. These few days are well compensated by the quantity of rain which falls in the above mentioned places.

Winter begins about the twentieth of November. This month, in particular the last days, is snowy and cold. Nevertheless there are fine days in the beginning, as we have already mentioned in speaking of the Quebec summer. The temperature of this month is generally finer in Bay des Chaleurs than in Scotland and in England and less disagreeable than that in Paris and Berlin, where the indian summer is unknown. The first week of December is generally snowy, the remainder of the month is cold and fine, especially about Xmas. The weather is clear, pure and the air dry ; and all that amply compensates the cold which is not too extreme. It is wished for by those who work in the forest. There are a few exceptionnally cold day about the beginning of January, which are generally followed by a snow storm ; but the temperature during the remainder of the month is not incommodious and does not surpass the usual

variations of the thermometer at this season. The sky is always clear, the sun brililant and the weather most agreable. The coldest days are felt about the first of February, which is the most snowy. Towards the latter end of the month, the temperature gradually rises to 41 ° and sometimes to 45 ° .

The mean temperature of the three months of winter is :

	December,	*January,*	*Fabruary,*	*Winter.*
New-Carlisle	19 ° 3'	16 ° 2'	15 ° 2'	16 ° 9'
Carleton	17 ° 2'	13 ° 4'	11 ° 3'	15 ° 5'
Father Point	16 ° 2'	13 ° 9'	12 ° 6'	14 ° 2'
Cape Rozier	12 ° 2'	12 ° 2'	15 ° 8'	13 ° 4'
Gaspesia	16 ° 2'	13 ° 9'	13 ° 9'	15 ° 0'

Compased with the principal cities of Europe.

London	39 ° 2'	St-Petersburg	18 ° 1'
Liverpool	40 ° 5'	New-Carlisle	16 ° 9'
Glasgow	39 ° 6'	Carleton	15 ° 6'
Edimburg	38 ° 4'	Father-Point	14 ° 2'
Berlin	31 ° 4'	Cape-Rosier	13 ° 4'
Paris	37 ° 8'		

These figures show the temperature of Gaspesia is lower than that of England or Scotland, but the cold is not so keely felt on account of its dryness. In the above mentioned countries the thermometer does not fall as low as in the province of Quebec ; but the humidity renders the weather raw and cold and very disagreeable, wheras here the weather is clear dry and agreable. Whatever may be the thinness of your clothes, as long as they do not let the wind pass through, you can bear the cold, were the thermometer 10° or 15° below zero. This fact is admitted by a great number of english writers who after having lived in England, for many years, came over to Canada to pass the remainder of their days. We will name a few.

Mr. Anderson says : the cold in winter is intense ; but as the frost continues without interruption and as during this season the whether is bright, the air pure and dry and more healthy and agreable than in damp climates. There are not more than three or four days, during the season that ship carpenters and other trademen are prevented from working by the cold. This is one of the most convencing and irrefutable proofs that Canada is not as cold comperatively to Great Britain, although the thermometer rises higher in the latter than in the former. During this season the weather is far brighter in Canada than in En-

gland. When every thing is taken into consideration, the climate of Canada is equally as agreeable as favorable to agricultural purposes and far healthier than England.

" Gray, in writing about Canada says : although the temperature is lower, we suffer less of cold than in England. The weather is so dry and....."

According to Lambert, " fromXmas to the feast of Our Lady, the winter is nearly always remarked by the purity of the atmosphere, which is bright and rarely darkened by fogs or clouds. The dry and cold weather is very seldom interrupted by snow storms, hail and rain. All this makes the weather so agreeable and so ple5sant in Canada that we are never obliged to change our clothes.

Perhaps I would astonish those who have heard so many tales about the cold in Canada, in saying that the people of Great Britain suffer more from cold than we do."

The above quotations clearly show that we would be very much mistaken in judging the cold of our winters by the indications of the barrometer and they prove that we suffer less of cold here than the people of England and that the weather is finer. This can be said in particular of Bay des Chaleurs which as regard its climate and temperature, is without doubt the finest part of this Province. The neighbourhood of the sea has a great influence on temperature, which it moderates and gives it a regularity which is not found in any other place. Then the Schickshock mountains, which break the north and northeastern wind, contribute a large part to the amelioration of the winter climates of this beautiful country.

In 1880, the extreme temperatures were :

	Lowest			*Highest*		
	December	January	February	December	January	February
New-Carlisle..,...	10° 5'	20° 5'	18° 8'	36° 5'	43° 5'	44° 5'
Carleton	6° 0'	11° 8'	18° 0'	36° 0'	39° 0'	41° 0'
Father-Point	7° 2'	15° 3'	20° 5'	35° 0'	37° 5'	43° 1'
Montreal	8° 6'	9° 5'	17° 5'	40° 6'	43° 8'	51° 2'
Quebec....., ...	10° 0'	9° 0'	22° 0'	33° 5'	40° 0'	44° 0'

In 1870. the thermometer fell in January to 28° at Montreal and to 26° 7 at Quebec. The following year, it fell to 28° at Montreal, in February, and to 28° 5 at Quebec, in the same month, which did not happen in Bay des Chaleurs, whose the winter temperature is higher than at Quebec and about equal with that of Montreal. The mean temperature, during the

winter months was : at Montreal, in December, 15 ° 7 ; January 22 ° 4 ; February, 19 ° 9 ; winter, 21 ° 5 ; at Quebec December 14 ° 1 ; Jan. 17 ° 4 ; Feb. 14 ° 8 ; winter, 16 ° 3. These figures, comparsed with the second last table, prove what we are after showing. The number of raining and snowing days as well as the quantity of rain and snow fallen are :

	Snow						*Rain*					
	December		Jannuary		February		December		January		February	
	dy	*inc*	*dy*	*inc*	*dy*	*inc*	*dy*	*inc*	*dy*	*inc*	*dy*	*inc*
New-Carlisle	6	3.00	3	9.00	9	17.00	0	0 00	2	light	1	0.32
Carleton	7	9.50	12	32.00	6	18.00	0	0.00	0	0.00	2	0.20
Father-Point	14	13.90	17	25.50	12	17.00	0	0.00	1	light	3	0.26
Cape-Rosier.	3	14.30	6	21.40	7	63.00	1	light	4	0.89	2	0.27
Montreal	18	17.60	11	16.30	16	36.00	2	0.29	12	1.27	6	1.14
Quebec	16	27.30	20	30.60	17	34.40	0	0.00	4	0.51	5	0.60

For the whole winter ;

	Snow		*Rain*	
	dy	*inc*	*dy*	*inc*
New-Carlisle	18	32.00	3	0.32
Carleton	25	59.50	2	0.50
Father-Point	43	56.20	4	0.26
Cape Rozier	16	98.40	6	1.16
Quebec	53	92.30	9	1.10
Montreal	45	59.90	20	2.70

These figures clearly show that the winter is finer, less snowing and raining at Bay des Chaleurs than at Montréal and especially at Quebec, where there falls about the same quantity of snow as at Cape Rozier where the winter is felt the most in Gaspesia. The depth of snow at Carleton and New Carlisle is not more than three or four feet on the level.

It has already been proved that there falls less snow in the south of Gaspesia than in Montreal or Quebec.

The harvest season, (that is to say the interval of weather exempt from frost) is long enough to ripen the corn and to allow it to be properly saved. This fact is shown in the following table, which is taken from the report of the Meteorological Board of Canada for the year 1880.

	Last Frost in Spring		*First Frost in Autumn*		*Interval without frost*
New-Carlisle.....	19 may	28 ° 1	2 october,	31 ° 1'	135 days
Carleton	14 "	24 ° 0'	21 sept.	29 ° 5'	138 "
Father-Point.....,	11 "	30 ° 0'	25 october,	32 ° 3'	152 "
Quebec.....	15 "	32 ° 0'	14 "	31 ° 0'	152 "
Montreal	1er "	22 ° 9'	20 "	31 ° 3'	172

Although, at New-Carlisle, the season exempt of frost is the shortest, nevertheless, it exceeds four months and a half. And this frost—the table shows it—is very light and harmless to grain and other delicate plants. The mercury scarcely falls to freezing point. The white frost does not make its appearance until later on. And, as a general rule, the harvest commences on the 25th of August, sometimes before, in certain places, so that the farmers have more than a month and a half to save their grain before the hard frost and cold rains of autumn, whose first part is very fine. What more can farmers desire? They have over five months to labor their land, and I may say six, because the frost, which falls during the month of May, does not harm the grain.

Let us complete the above in showing a table of the mean temperature of each month of the year.

	New-Carlisle	*Carleton*	*Father-Point*	*Cape-Rosier*
January	16° 2'	13° 4'	13° 9'	12° 2'
February	15° 2'	11° 3'	12° 6'	15° 8'
March	17° 6'	14° 8'	13° 6'	15° 6'
April	36° 0'	30° 5'	30° 3'	33° 3'
May	47° 8'	41° 7'	43° 1'	40° 1'
June	69° 8'	58° 6'	54° 7'	51° 4'
July	69° 8'	65° 1'	57° 5'	58° 5'
August	65° 5'	60° 6'	56° 6'	56° 8'
September	58° 8'	54° 7'	49° 8'	50° 3'
October	46° 1'	42° 4'	41° 2'	39° 9'
November	27° 7'	20° 7'	26° 9'	27° 7'
December	19° 3'	17° 2'	16° 2'	12° 2'
Year	40° 7'	35° 93'	34° 72'	34° 5'

The following figures show the temperature of each season:

	Spring	*Summer*	*Autumn*	*Winter*	*Year*
New Carlisle	48° 2'	64° 7'	43° 2'	16° 9'	40° 70'
Carleton	48° 1'	62° 7'	39° 3'	15° 5'	35° 93'
Father Point	42° 7'	54° 7'	38° 3'	14° 2'	34° 72'
Cape Rosier	29° 7'	55° 6'	[illegible]	3° 4'	34° 50'
Quebec	49° 1'	62° [illegible]		16° 3'	38° 78'
Montreal	54° 0'	[illegible]		21° 5'	43° 02'
London	47°		40°	39° 2'	49° 60'
Liverpool	46° [illegible]	57° 0	40°	40° 5'	48° 30'
Glascow	45° 9	60° 1'	49° 0'	39° 6'	48° 60'
Edimburg	45° 0'	57° [illegible]	47° 9'	38° 4'	47° 10'
Paris	50° 6'	64° [illegible]	52° 2'	37° 8'	51° 30'
Berlin	47° 4'	5[illegible]° 2'	49° 2	31° 4'	48° 10'
St-Petersburg	35° 9'	60° 6'	40° 3'	18° 1'	[illegible]° 70'

The temperatures shown in this table are about the same, with the exception of that of winter which is the coldest, as those of the most inhabited parts of Europe. Summer season, at Bay des Chaleurs is reputed hy its mildnes, its regularity and salubrity and attracts great numbers of sick or dilapidated people.

It is well known that the summer temperature is higher in the interior on account of it being free from the sea breeze which refreshed the temperature in the localities when the above observations were made.

Now what proves the climate of Gaspesia to be good and favorable to agricultural operations is that wheat grows well and in all the parts of this country and ripens to perfection. At the first universal exhibition of Paris, an honorable mention was awarded to wheat grown in Gaspe county, which, as regards the climate, is inferior to Bonaventure. Finally indian corn, which cannot be cultivated in Great Britain on account of the temperature, is harvested in abundance in Gaspesia, which can be seen by the census of 1881. Another proof of the mildness of the climate is, that the melon and tomatoe grow in the fields; both of these plants are very delicate and are very often grown in hot beds, but at Bay des Chaleurs, they do not require such care, on account of the mild temperature. Heat and rain are the two principal agents which make the soil and climate favorable to agricultural productions. As regard the heat of the climate, we have already seen that the agricultural season of Gaspesia is warmer and preferable to that of the principal countries of Europe. The following table will show that Gaspesia is not behind in rain.

Number of rainy days and quantity of rain fallen in Gaspesia, during 1372, *for Cape Rosier, and* 1880 *for the other localities:*

	Father Point.		Cape Rosier.		New Cartisle.		Carleton.	
	RAIN		RAIN		RAIN		RAIN	
	ds	*inc*	*ds*	*inc*	*ds*	*inc*	*ds*	*inc*
January	0	0.00	4	0.89	1	0.06	1	0.05
February	3	0.26	2	0.27	0	0.00	1	0.05
March	0	0.00	5	3.66	4	1.92	5	2.41
April	9	2.42	2	0.99	2	1.15	3	0.88
May	16	2 64	6	3.01	8	2,22	3	0.85
June	7	1.21	14	5.71	13	5.84	15	6.44

July	12	2.20	13	3.17	8	2.04	8	2.82
August	8	1.15	7	2.66	7	3.23	9	1.08
September	20	4.32	7	1.40	5	1.04	10	1.34
October	16	4.77	12	2.68	7	1,17	21	2.71
November	2	0.07	7	1.61	4	2.07	5	1.20
December	0	0.00	1	traces	1	0.20	0	0.00
Year	94	19.04	80	26.05	60	20.94	71	19.80

For each of the four seasons we find what follows, in Gaspesia and certain other localities:

	Spring		*Summer*		*Autumn*		*Winter*		*Year*	
	ds	inc	ds	inc	ds	inc	ds	inc	ds	inc
New Carlisle	9	2.58	24	4.77	19	7.46	3	0.32	55	15 13
Carleton	16	4.83	27	7.31	20	11.27	2	0.20	74	23.79
Father Point	25	5.06	27	4.56	38	9.14	4	0.26	94	19.02
Cape Rosier	13	7.66	34	11.54	26	5.69	6	1 16	79	26.05
Quebec	51	10.58	41	11,46	25	7.84	9	1.11	126	30.99
Montreal	47	9,41	53	9,62	27	8.36	20	2.41	147	29.80
London		4.00		6.00		6.25				20.69
Liverpool		6.19		9.78		10.81				34.10
Glasgow		3.80		6.39		5.82				21.33
Edimburg		5.40		7.10		8.90				28.08
Paris		5.53		5.92		6.51				22.64
Berlin		5-66		7.21		5.45				13.56
St. Petersburg		2.89		6.73		5,11				14.73

As may be seen by the foregoing tables, there is a similitude between the climate of Gaspesia and that of the most pepled and central places in Europe.

The number of rainy days in Gaspesia is no more than half the number of those in Quebec or in Montreal, particularly in spring and autumn, which makes these seasons preferable for farming in Gaspesia than in the districts of Quebec and Montreal. It is impossible not to admit that the climate of Gaspesia is superior to that of any western part of the Province, when the number of rainy days are taken into consideration. During 1881 there were 55 rainy days at New Carlisle, 74 at Carleton, 126 at Quebec and 147 at Montreal.

The following table will show the number of snowy days and the quantity of snow fallen during spring, autumn and winter:

	Spring		*Autumn*		*Winter*		*Year*	
	days	inc	days	inc	days	inc	doys	inc
New Carlisle	6	6.00	4	9.00	18	32.00	28	47.00
Carleton	10	19.50	7	11.50	25	59.50	42	81.50
Father Point	17	21.50	11	21.82	43	56.50	71	99.82
Cape Rosier	14	51.60	7	4.20	16	98.40	37	154.20
Quebec	24	54.40	19	29.30	53	92.30	96	176 00
Montreal	26	33.70	20	15.80	45	59.90	91	109.40

The number of snowy days, during the year, was 28 at New Carlisle, and 42 at Carleton, and at Montreal, 91 and at Quebec 96, or twice the number at Bay des Chaleurs. The quantity of snow fallen was 47 inches at New-Carlisle, and 81.50 at Carleton, and 109.40 at Montreal and 176 at Quebec, which clearly shows that during the snowy season the weather is finer in Gaspesia than in either of the districts of Montreal or Quebec.

The table also shows that there is a great difference between the temperature and the state of the atmosphere of the northern and southern parts of Gaspesia. Towards the north, the influence of the ice, which comes in by the strait of Belle-Ile, accompanied by north and northeastern winds, lowers the winter temperature and augments the quantity of snow, it also augments the cold and dampness of the spring and autumn, by cold and damps currents which are characteristic to the northeastern wind. The northeastern wind is unknown in the south ; they are broken by the Shickshock mountains which absorb their humidity and expell their cold. This is the reason why the eastern and western winds are only known in that region ; the only rhumb which comes from the north is the northwestern and as this wind is nearly always partly south, it is very agreeable and moderates the temperature especially in summer. The following extract, which is taken from Mr Sim's report, gives a good idea of the climate of Bay des Chaleurs and of the Metapedia valley :

" The country (which surrounds Bay des Chaleurs) produces all sorts of grains which grow in Lower Canada. Fogs are very rare here. The snow falls about the end of October and the winter begins towards the middle of November ; but the weather is generally mild until the end of the month. The average depth of the snow is from five to six feet, it dissapears under the ardent rays of the April sun and about the first of May the land is fit for ploughing, and eight days after the seed is sown. In the districts of Bay des Chaleurs and the Ristigouche river the wind is generally eastern or western ; squalls are very rare.

The climate of this part of Canada, (the Metapedia valley, which is twenty miles from the St-Lawrence) does not differ much from that of Quebec, although it is cooler in summer. The piercing cold days are not so frequent here and nevertheless there is no soft or rainy weather during the winter. The snow falls about the 22nd of October ; but it does not remain more than two days. Then comes a period of fine weather interrup-

ted by one or two snow storms, until the 21st of November, when the winter definitively begins.

During ordinary winters, there falls from four to six feet of snow. The fields are bare on the 20th of April and the ploughing commences on the first of May. They sow rye and peas from this date until the 28th, oats at the end of the month, and towards the end of June, barley and potatoes. The harvest begins about the 25th of August and ends with the month of September, when the potatoe digging commences.

The above more than proves that the climate of Gaspesia is all that may be wished for, and well adapted to agricultural operations and rich enough to procure the comfort of the inhabitants of this beautiful country.

CHAPTER IX.

HIGH ROADS—SEAPORT AND NAVIGATION.

Gaspesia is surrounded by a high road which, in general, is far superior to any other in the province. This road is somewhat hilly in places, but it is hard and as fit for waggons as a macadamized one, We do not know anything finer than the part of this public road which crosses the Metapedia valley and winds along the shores of Bay des Chaleurs and St. Lawrence gulf till it reaches Gaspe village. We have travelled it for six weeks and have not been the least fatigued. The other part is not so good, especially the maritime road, but for all that it is very good for waggonning. In the most inhabited places, the government pays for the keeping of the road in order, it must be said that it is well kept.

Besides this great route, there are many others which are branched of into the interior where unfortunately a great number of settlers have made their homes in the heart of the forest. Their roads are also kept in good order, and we can safely say that as regards roads, Gaspesia is superior to nearly all the other parts of the province. The soil is so well drained, that the roads which are opened without much difficulty became dry and hard.

In fact, there is but one railroad in Gaspesia, the Intercolonial, which crosses the Metapedia and goes from north to south from the St. Lawrence to the Ristigouche, a distance of about one hundred miles. They are speaking of building a railroad branch

which will start from the Intercolonial station, at Metapedia, or in the neighbourhood of Campbellton, and run in direct line through the south part of this region, till it reaches Gaspe Basin, which makes a distance of about 180 miles. The company which has had itself incorporated to build this road has among its managers some prominent, and able and financial men who are well acquainted with railroad building. They have obtained from the Quebec government a subvention of 1,800,000 acres of land, and from the Federal government a subsidy of $3,200 per miles or $320,000 for the line between Metapedia and Paspebiac which is one hundred mile long. These two subventions make a total value of $2,000,000 and should assure the execution of the enterprise, which appears to have a very fine prospect.

At the last legislative session at Quebec, there was an other rail road Company incorporated to build a road in the northern part of Gaspesia, (from some station on the Intercolonial, between Rimouski and the Petit Metis, to Gaspe Bassin, in passing by Matane, Cape-Chatte and Ste-Anne des Monts. This road will be about one hundred and eighty miles long and will complete a web which will surround all Gaspesia and form about 500 miles of rail roads.

But the inhabitants of Gaspesia have other means of transport and communication which are as advantageous as rail roads: that is by water. They can easily transport small loads from one locality to the other with their barges and, in the upper part of Bay des Chaleurs from their residences to the Intercolonial stations, which are all along the south shore of the bay to Bathurst. This method of transport is not very expensive nearly as speedy as carting on a high way with horses. On the north and east coast they use schooners for large transportations, which make a considerable traffic and constitute the common method of transport and exchange of natural produces for merchandise between these localities and Quebec or other commercial centers where the produce of Gaspesia is bought.

The nine-tenths of the fish produce are sold to ships coming from Europe. These ships take their cargoes at Gaspe, Percé and Paspediac, which are safe and commodious ports, especially those of Paspediac and Gaspe. The latter is at the end of the bay from which it takes its name and can easily harbour a fleet of 1000 ships. There are wharves where ships of a deep draw can be moored without any fear of touching the bottom. There are also good wharves at Paspediac, but the water is not so deep.

There is no wharf at Perce, but the ships can easily be loaded and unloaded by means of flat boots. The same thing can be done at Anse du Cap and Port Daniel &c. There is a fine wharf at Carleton for vessels of a small draw and Tracodigetche bay offers an excellent port to large vessels which cannot be moored at Carleton. As regards navigation of Bay des Chaleurs, it is the surest and best, because ships pass in the middle and are not obstructed by islands, rocks &c.

There are two lines of steamers which traffic between Gaspesia and Quebec: the Quebec and Campbellton lines. The former puts the ports of Gaspesia. as far as Percé,, in direct communication with Quebec, Montreal and the towns of Nova Scotia. The latter travels between the localities of Bay des Chaleurs, as far as Gaspe, and the Intercolonial at Campbellton. The government pays for the transport of the mail. The steamer of this line generally makes two trips in the week and that of Quebec two per month. The little steamer (BEAVER) which belongs to Mr Fraser, at Quebec merchant, traffics between Quebec and the lower ports of Gaspesia.

As we have seen, the inhabitants of Gaspesia are not in want of means of communication, and the transport is not very expensive. It is true that this accomodation lasts but six months in the year, but this inconvenience will dissapear when the Bay des Chaleurs Rail road will be built. Nevertheless, the Intercolonial which is not far distant from the greatest number of the inhabitants of Gaspesia, keeps up a regular communication with all the principal cities of Canada.

CHAPTER X

COMMERCE—IMPORTATIONS AND EXPORTATIONS—TONNAGE OF THE DIFFERENT PORTS—COUNTRIES WITH WHICH COMMERCE IS MADE.

The exterior commerce is reserved to the ports of Gaspe, Perce and New-Carlisle, or Paspebiac. It is at these ports (and at their interior depending ports) that importations and exportations of Gaspesia are inscribed. These of the north are registered at Quebec or Rimouski and it is nearly impossible to distinguish them and give the exact and complete statistics of the exterior north commerce. The following figures belong to the other.

Table of importations and exportations, by sea navigation, to and from the ports of Gaspe and New-Carlisle, from 1851 *to* 1867

	Gaspe		*New-Carlisle*		*Total*	
	Exp.	*Imp.*	*Exp.*	*Imp.*	*Exp.*	*Imp.*
1851	$141,737	$ 53,351	$ 80,101	$ 53,679	$221,836	$107,030
1852	131,432	36,722	104,866	67,650	236,928	104,372
1853	130,671	41,347	119,768	67,840	250:439	109,187
1854	120,232	61,652	107,428	80,392	227,660	142,044
1855	153,694	59,608	139,032	114,320	292,726	173,928
1856	176,711	63,837	145,864	118,233	322,572	182,070
1857	188,210	82,422	181,419	117,879	369,629	200,301
1858	217,858	82,128	221,071	92,828	438'929	174,956
1859	244.765	108,665	253,190	126,924	497,955	235,589
1860	273,094	106,253	253,363	127-034	526,457	233,287
1861	630,477	374,729	35,468	5,472	665,945	380,201
1862	691,075	420,180	.....	2,187	691,075	422,367
1863	112,619	265,233	1,126	1,700	113,745	266,932
1864	69,227	328,585	2,915	404	72,142	328,988
1865	748,985	553,892	2,833	3,158	751,818	557,050
1866	886,360	575,140	1;587	2,103	887,947	577,243
1867	436,733	215,985	294,076	145,309	730,809	361,294

This table shows the following increases, during that period of 16 years. Gaspe Port importations 304 per cent, or 19 per cent, per year ; exportations, 208 per cent, or 13 per cent per year.

New Carlisle Port—importations, 170 per cent, or 10.1 per cent, per year ; exportations, 223 per cent, or 14 per cent, per year ;

Both Ports—importations 237 per cent, or 15 per cent, per year ; exportations, 223 per cent or 14 per cent per year.

These figures show as constant and a more considerable increase than in the other parts of the province.

For 1861, these totals give for each person of the counties of Gaspe and Bonaventure $28.19 of exportations $17.22 of importations. For 186,1 which nevertheless shows a certain diminution, the figure of exportations is $25.24 and that of importations of $12.48 per head. For all the Province, during 1867, th figure of exportations was $20.68 per head and that of importations $29.85, which gives in favor of Gaspesia excess of exportations amounting to 4.56 per head, and a decease of $16. 37 of importations per head.

The articles of exportations and importations and also their value will be seen is the following lists which give detailed state of the commercial movement is Gaspe Port during 1861.

Exportations	*Quantity*	*Value*
Dry and smoked fish	143,783 cwt.	$420,631
Salt fish	80,084 "	203,451
Fresh "	.....	16,426
Fish oil	44,474 gall.	19,259
Seal skins		3,933
Total		$663,700

Fish sold in the country :

Cod fish	$55,362	
Herring	37,508	
Salmon and Trout	19,623	
Mackerel	2,610	
Oysters	1,932	
Oil	62,448	179,483
Total value of sold fish		$843,183

Bark Canoes	7	3	Horses	1	50
Barley	1,104 bushels	669	Skins	.....	2,113
Butter	140 lbs	21	Lard	200 lbs	40
Eggs	184 doz	28	Meat	.....	98
Feathers	.....	196	Oxen	2	40
Flower	15 brls	120	Minerals	.....	112
Green fruits	.....	82	Chalik	.....	40
Furs and Skins	.....	8,676	Divers objects	.....	53
Grinding stones	.....	128			
			Total	.....	$355,652

The exported fish was sent to the following foreign places :

Exported articles	*Great Britain*	*English Colonies* N. America	W. Indi.	*United States.*	*Foreign countries*
Dried and smo. fish	$103,368	$29,571	$ 90	$ 664	$286,038
" Salted	12,854	93,334	80	86,826	357
" Fresh	.....	480	.....	15,947	.....
" Fish oil	11,538	7.399	.....	331	.....
" F. skins	.....	2,865	.....	1,068	.....
Total	127,660	133,640	170	114,835	287,295

The general table of exportations $855,652, includes those of N. Carlisle and the value of the articles sent from this ports to the other parts of the province, which explains the difference between thise figures and those which are given for 1861 in the large table of exportations *via* the sea to foreign countries.

The principal objects of importations are :

Flour	29,068 barils	$145,240
Meats	2,469 "	39,262
Biscuits	4,426 "	16,915
Merchandise—articles of novelty		16,561
Hardware		15,876
Woolen goods		10,466
Tea		10,683
Butter	65,480 lbs	7,936
Salt	11,510 bags	5,776
Tobacco	34,974 lbs	5,792
Leather, wine &c		105,694
In all		$380,201

From 1867, the commercial table of Gaspesia seems to show a constant diminution. This diminution is only apparent and is well explained by known a circumstances. Before the Confederation, all the commerce that was made between Gaspesia. Nova Scotia, and New Brunswick, was very naturally committed with exterior commerce because these two provinces did not then belong to Canada. Since the Confederation the duties and commercial restrictions which existed between these provinces and us were abolished, and all the commerce that is transacted between them and Gaspesia is considered interior commerce, which diminishes the figures of commercial exportation and importations in the ports of Gaspe and Bay des Chaleurs, At present, a great quantity of fish which used to be directly exported, is sent to Halifax where it is shipped to foreign countries so that the figure of these importations are found in the registers of Halifax port instead of in those of Gaspesia.

Another cause which appearingly diminishes the figure of importations, is the line of steamers and the Intercolonial rail road. At first there was the line of the Quebec and Gulf ports steamers, which had for many years three steamers running between Quebec and the ports of Bay des Chaleurs. Shortly

after the *Beaver*, which belongs to M. A. Fraser, entered the same line. Finally, the Intercolonial rail road a few years ago opened commerce between Quebec and Bay des Chaleurs ports. These new means of transport have made a revolution in the commerce of the greater part of Gaspesia, and at present, all the articles of consummation, which were directly imported, from foreign places to the ports of New Carlisle and Gaspe are bought at Toronto and Montreal and are sent down by rail or boat, which diminishes the figures of importations and exterior commerce. There is a great deal of commercial transactions done with other great cities, but their names are not on the list of importations to Gaspe and New Carlisle ports.

Thus is the apparent commercial diminution explained.

	Gaspe		*New Carlisle*		*Perce*		*Total*	
	Export.	*Impor.*	*Export.*	*Import.*	*Export.*	*Import.*	*Export.*	*Import.*
	$	$	$	$	$	$	$	$
1868	224,214	75,675	292,744	117,296			516,958	192,871
1869	239,138	72,750	296,702	79,606			535,900	152,356
1870	318,427	112,236	260,395	133,232			578,822	245,468
1871	341,508	117,808	349,188	124,240			690.696	242,048
1872	413,397	131,803	363,131	131,373			776.523	263,176
1873	372,938	77,449	359,445	103,057	103,902	64,934	836,285	245,444
1874	393,765	45,437	337,859	99,867	87,488	39,744	819,112	185,078
1875	336,481	53,262	325,529	106,131	72,490	54,321	734,500	210,714
1876	300,897	48,181	333,131	97,442	76,870	61,897	710,898	207,920
1877	443,826	50.692	391,212	97,043	120,820	61,265	955,858	209,000
1878	319,047	43,485	461,805	83,067	61,200	43,796	842,052	170.348
1879	313 821	31,260	416.187	99,117	75,828	30,039	805,886	170,416
1880	382,375	31,371	425.592	75,244	50,787	40,113	858,754	147,728
1881	343,114	24.600	401,634	69,782	28,786	14,524	770,534	108,900
1882	316,872	31,617	420.189	68,729	18,456	22,958	755,517	123,304

It is evident that the importations will diminish or remain stationary at these three ports, unless they be put in communication with the principal cities of the interior, by a rail road branching off the Intercolonial, which would only be the continuation of the Intercolonial along the shore of Bay des Chaleurs, as we will see further on.

The two following lists which are taken from the *Report of the Marine & Fisheries Department for* 1871, will give a good idea of the commercial movement at the Gaspe and New-Carlisle ports.

Table of exportations and the number of ships registered at their arrival and departure from the port of Gaspe during 1871 :

Species of fish		*Destination*	*Quantity*	*Value*	*Total value*
Dry cod fish	cwts	England	6,913	$ 28,430.00	
do	do	South America	28,212	126,860.00	
do	do	Brazil	2,913	14,500.00	
do	do	Bahia	1,463	64,500 00	
do	do	Naples	8,981	3,410.00	
do	do	Oporto	1,748	6,990.00	
do	do	West Indies	16,158	42.529.00	
do	do	United States	347	1,388.00	
		(66,735 cwts.)			$261,607.00
Green fish	do	Barbados	2	10.00	
do	do	Naples	24	120.00	
do	do	South America	4	18.00	
do	do	Oporto	2	12.00	
do	do	England	563	2,393.00	
		(595 cwts)			2,553.00
Salmon	bls	United States	2	32.00	
do	do	Barbados	2	20.00	
do	do	England	3	45.00	
		(7 brls)			97.00
Herring	do	England	1,734	5,230.00	
do	do	Naples	350	1,050 00	
do	do	South America	181	545.00	
do	do	West Ind.	469	1,408.00	
do	do	United States	2,643	5,288.00	
		(5377 brls)			13,521.00
Smoked Herring	bls	United States	18	5.00	
					5.00
Fish oil	galls	England	35,828	17,821.00	17,901.00
Seal skins			80	80.00	
					$295,648.0

The foregoing statement is as correct as possible according to the information which the merchants and others gave us. The mentioned value shows the mean value at Gaspé. This statement does not show there al exportation, because besides fish &c., exported to foreign countries, our merchants buy a great quantity of dry cod fish and ship it during the winter from Halifax to the West India Islands and Brazil; besides a great quantity of whale oil and green fish, is sold in Quebec and in Montreal. Besides this, we estimate that by the loss of several ships, there will remain more than 26,000 cwts of dry fish this winter, in Gaspe port.

"It is hard to procure the details of the importations, but their value can be estimated with safety to $132,000 for the current

year, and this amount would be still greater, were it not for the loss of a ship. which sailed for this port with a general cargo. A great number of articles (such as boots, shoes &c.) which are consumed in this port and which were formerly imported from England, are now imported from different parts of the Dominion. We cannot form a true estimation of the articles which are bought in other parts of the Dominion, nor of the coasting trade because it is not kept count of in the custom house; but two or three years ago, the value of coasting trade that entered this port was $286,000. At that time New-Brunswick and Nova Scotia did not belong to the Dominion; but the importations of these provinces were not of much value nu the above amount represents nearly in entire the value and produces and manufactured articles coming from Quebec and Ontario, or of merchandises imported by canadian merchants.

The following table shows the quantity and value of fish exported from Gaspe port in 1871, *and the countries to which fish was sent :*

From where they came and where they went	*Arrival*		*Departure*	*Exportations*			
	With a cargo	With ballast	With a cargo	Nature of cargo	Quantity	Value $	
United Kingdom...	21	3	10	Dry fish cwts.....	19,408	71,871	
				Green " bris.....	435	1,343	
				Fish oil galls.....	19,902	9,851	
				Staves feet.....	955	29,483	
				Sawed lumber.....	.....	4,618	
				Diverse Mdse.....	.....	3,906	
N. B. American Colonies.....	4	5	3	.....Dry cod fish cwts	40	160	
				Sawed timber.....	.....	1,065	
				Divease Mdse.....	.....	436	
West Indies.....	7	..	7	.....Dry Cod fish	8,843	36,222	
				Green " bris	445	1,114	
				Sawed wood	.....	209	
				Diverse Mdse.....	.....	2,036	
United-States.....	1	1	.....	.....	.....	.....	.....
Spain	3	.....	3	.....Dry cod fish cwts	27,688	117,312	
Portugal	8	.....	3	..... do do..	14,275	57,600	
Italy..	.....	.....	16	..... do do..	53,937	223,233	
Brazil	2	1	6	..... do do..	18,276	85,535	
Total.....	46	10	48	Total.....		$673,959	

The tonnage of the ocean ships, at New Carlisle and Gaspe port is shown in the following table :

	GASPE				NEW-CARLISLE			
Years		*Entered*		*Sailed out*	*Entered*		*Sailed out*	
1851	85	6,939	103	7,999	65	7,216	56	6,759
1852	44	5,106	36	4,808	68	6,268	57	5,782
1853	51	4,924	32	3,895	67	5,717	58	7,222
1854	41	4,663	38	4,781	54	3,225	45	4,662
1855	55	5,133	40	4,388	69	6,737	61	6,286
1856	62	7,294	47	6,321	94	8,914	77	8,787
1857	61	6,739	46	5,692	96	11,167	92	11,205
1858	65	5,817	48	6,365	121	12,295	99	12,722
1859	50	5,228	44	4,336	112	12,851	84	12,217
1860	59	6,304	50	5,349	119	14,553	101	11,787
1861	357	26,841	325	23,717	18	4,847	15	4,844
1862	305	24,255	279	21,425	2	109	1	37
1863								
1864	95	9,481	43	3,665	11	545	10	504
1865	35	4,926						
1866	279	23,313	248	20,485	25	893	11	860
1867	133	11,471	133	11,788	115	10,265	99	9,564

The following details will show the number of vessels that intered the ports of New Carlisle and Gaspe in 1861 and from where they came, to where they sailed and the number of th.ir crew :

ARRIVALS.

Gaspe port.

From what country.	*No. of ships.*	*Tonnage.*	*No. of men.*
United Kingdom.....	39	5,419	342
Nova Scotia.....	147	7,761	1,000
New Brunswick.....	64	5,237	483
Newfoundland.....	12	1,089	75
Prince Edward.....	28	1,287	153
United States.....	47	3,734	299
Brazil.....	1	268	12
Spain	15	1,484	106
Breme.....	1	150	8
Norway.....	2	512	24
Totals.....	356	26,941	2,502

NEW-CARLISLE PORT

United-Kingdom	6	2,592	72
New-Brunswick	5	460	27
Newfoundland	2	548	17
Prince Edward	1	63	4
France	1	246	9
Spain	3	638	31
Total	18	7,847	160
Gaspe	356	26,941	2,502
Grand total	374	34,788	2,662

The departures are given in the following table :

GASPE PORT

To	*Number of vessels*	*Tonn.*	*Number of men*
United Kingdom	6	2,818	148
United States	50	3,975	330
Portugal	1	71	7
Spain	19	1,751	122
Nova Scotia	112	5,389	687
New Brunswick	32	2,662	233
Newfoundland	15	1,435	85
Prince Edward	32	1,301	164
Italy	13	1,602	105
Brazil	6	1,133	58
	396	22,137	1,949

NEW-CARLISLE PORT

United Kingdom	14	4,781	142
New Brunswick	1	63	4
Total	15	4,844	146
Gaspé	396	22,137	1,949
Grand total	411	26,981	2,095

In analyzing this table, we see that the maritime commerce which frequented the ports of Gaspesia, Nova Scotia, New Brunswick and P. E. Island, form the following proportion :

Coming in—245 vessels, or 65 per cent of the total number, and 14,808 ton, or 43 per cent of the total tonnage.

Going out—177 vessels, or 48 per cent of the total number, and 9,415 tons, or 34 per cent of the total tonnage.

From 1868, these figures were not connected in the registers of Gaspe port, because the provinces of New Brunswick, Nova Scotia and Prince Edward Island, belong to the Confederation, since 1874. Nevertheless this maritime mouvement has always continued, and has been increased, although it is not registered in the Custom House.

Let us complete these figures by the navigation table from 1868 to 1882.

	GASPE				NEW-CARLISLE				PERCÉ			
	Arrived		*Departed*		*Arrived*		*Departed*		*Arrived*		*Departed*	
	No	Ton.	No	Ton.	No	Ton.	No	Ton.	No	Ton	No	Ton.
1868	39	5,105	31	3,315	48	6,568	53	6,491				
1869	43	6,339	40	5,361	24	7,452	61	8,083				
1870	58	6,894	54	6,626	66	8,712	64	7,468				
1871	54	7,847	46	6,890	59	7,983	66	8,432				
1872	58	8,322	50	7,831	55	8,528	70	6,372				
1873	46	8,861	46	7,313	58	7,891	77	9,818	18	2,089	11	1,174
1874	41	8,883	47	9,179	42	7,900	52	9,255	18	1,578	10	1,070
1875	40	9,109	42	11,471	39	6,470	55	9,143	8	862	8	862
1876	38	8,044	34	7,769	45	6,320	54	7,257	13	2,511	9	1,599
1877	42	10,802	43	9,717	45	6,180	57	8,310	17	2,641	13	2,690
1878	34	5,759	34	0,079	55	9,150	72	12,098	14	1,876	8	891
1879	35	4,926	36	5,008	55	10,153	66	11,408	9	751	8	765
1880	38	7,858	40	7,586	38	5,892	47	6,644	15	1,931	7	719
1881	32	7,363	42	7,953	31	6,395	55	9,660	14	1,624	7	664
1882	32	6,466	38	8,208	37	5,937	64	11,286	11	1,700	4	701

Percé Port was established in 1873. The above figures denote the number of vessels doing exterior maritime commerce. The coast trading with the ports which now occupy our attention, is more considerable as will be seen by the following table, for 1882.

The list of ships employed in coast trading with the ports of Gaspe, Perce and New Carlisle.

	STEAMSHIPS			
Transacting	*Number*	*Tonnage*	*Coast trading*	*Registered Tonnage*
Arrived.....	88	37,104	124	44,217
Departed.....	73	20,093	132	47,770
Total.....	161	66,197	256	91,987

		SAILING	SHIPS	
Arrived.....	120	6,487	204	14,349
Departed.....	119	5,068	196	9,557
Total.....	239	11,555	400	20,916
Steam.....	161	66,197	246	91,987
Grand Total	400	67,752	656	112,903

In adding the coast trading commerce to that of the exterior we find the following maritime commercial movement of th three ports of Gaspe, Percé and New Carlisle :

	No. of vessels.	*Tonnage.*
Arrived.....	616	113,330
Departed.....	626	111,683

These different tables show that the commerce of Gaspesia is of great importance. Nevertheless the importations consist in fish aione. Sometime there are a few cargoes of mixed goods—fish, shingles, grain and other articles, which are imported to the East Indias; but fish is the principal article exported. These mixed cargoes are always sold at high prices in the markets to which they are destined. The small vessels that take such cargoes generally trade with the merchants of the East Indias and bring back quantities of molasses, sugar and other produces which sell well in Canada,

It is evident that these cargoes would be unloaded at Gaspe and New Carlisle, if these ports were in communication by mean of a rail road with the great centers of commerce in the interior This road which would branch on to the Intercolonial in the environs of Matapedia or Campbelton, would also result in creating an immene commerese of exportation by the ports of Gaspe and in particular by that of New-Carlisle, which we will see further on. By this road, navigation on the St-Lawrence, which is more or less dangerous between Quebec and Anticosti can be avoided, without taking into consideration, that navigation opens a month later at New-Carlisle than at Quebec. In taking all these things into consideration, it is evident that if this rail road was built, which would be nothing more than a prolongation of the I. C. R. R., New-Carlisle would become one of the most important sea-ports of the Province.

CHAPTER XI

PASPEBIAC PORT--BAY DES CHALEURS R. ROAD.--ITS IMPORTANCE IN A COMMERCIAL AND POLITICAL POINT OF VIEW.

To place the Province of Quebec on the same rank as the United-States, it would require a permanent sea port town that would be accessible during summer and winter. During the former season, our beautiful St-Lawrence is without a rival and offers the greatest advantages for the exportation of the western agricultural produces; but as soon as the winter begins, the Quebec and Montreal ports are blocked with ice, immense quantities of produce coming from the west are sent by rail to the sea ports of the United-States. That is to say our rail roads loose a great deal of the western traffic, because we have not a winter sea port town.

Well, we have this winter port at Paspebiac in Bay des Chaleurs, and about one hundred miles of a rail road, would assure us of all the advantages of this port. Contrary to the erroneous idea, which unfortunately is widely spread, the navigation of Bay des Chaleurs,—which may be called the canadian Mediterranean—does not offer the least serious obstacle to navigation during the winter, at least on the side of the Province of Quebec. As far as Paspebiac, and even further towards the west, the surface of the water is always clear of ice and does not show any obstruction to a sailing vessel and much less to a steamer. There is no ice in the Gulf between Bay des Chaleurs and Newfoundland, that could hinder navigation. A steamer can sail between Liverpool and Paspebiac during the four seasons, without any difficulty. They who have any doubt about this port can read the report made in 1874, by a special commitee named to inquire into the shortest and best route "for the conveyance of the mail and passengers between Canada and Europe, and to find an the Canadian shores a port that would be accessible in summer and winter. This committee was presided by the Hon. Mr Robitaille, actually lieutenant governor of Quebec and at that time deputy of Bonaventure. After having obtained the opinion of a great number of the most competent men, the committee made the following report about Paspediac

"Port Paspebiac, which is situated on the north coast of Bay

des Chaleurs, possesses all the advantages of a first class port, because it is accessible in winter.

" In examining the advantages and inconveniences of this port your committee thought it advisable to study the navigation of the St-Lawrence Gulf.

" According to testimony of colonel Farijana, based on careful hydrographic studies, the south and west ports are navigable during winter."

" It has been shown to your committee that the polar ice brought into the Gulf by the strait of Belle-Ile floats to the north east of Anticosti with a swiftness of half a mile an hour ; that the ice of the St-Lawrence runs down the south side of the same island with a rapidity of two miles an hour; that the current of the river is so strong that it forces the ice to take the direction of the south side of Newfoundland and leaves the southern and eastern parts of the Gulf clear of ice.

The testimony of Colonel Farijana is favorable to Paspebiac port.

" *The Gulf of St. Lawrence*, being navigable in all seasons, says he, it is evident that Paspebiac is the most advantageous. Its geographical position puts it under the controle of the Canadians It is nearer the great centers of Canada than Halifax or Louisburg. It is preferable, in a commercial point of view, because the trip by rail would be shorter and less expensive.

It is well to remark that this testimony of Colonel Farijana is not only based on theoretical studies, but also on practical experience. Indeed, this gentleman navigated the Gulf and Bay des Chaleurs during the winter. During the Trent affair, in 1861, he passed the winter as a hydrographic engineer, on board of the man of war vessel which the american government had cruising in the Gulf during the winter, to hinder the southern vessels from taking refuge there to run the commercial ships of the north. The ships on which Colonel Farijana was commander cruised in the Gulf with the same ease as if it were in summer, which proves that the imaginary difficulty of which we have often spoken is nothing more than a dream whose inanition is easily shown. The winter navigation will be as easy as the summer one. Some time ago it was said that the Gulf was not navigable in summer ; but experience has proved the contrary and the twenty two lines of steamers which sail from Quebec to Liverpool testify that the gulf is one of the best lines of oceanic navigation that can be imagined.

But the navigation of Bay des Chaleurs is still easier. There are no islands, no rocks or no sanbars upon which a ship might run and nearly everywhere a ship can move within a few acres of the shores and in fine, the navigation is the same as on high sea, with the exception that the waves and wind are not so strong. Let us remark that in passing by Bay des Chaleurs they avoid the dangerous current of the Bay of Fundy, Cape Sable, Sable island, and other dangerous places which cause so many shipwrecks to the vessel coming to and going from our ports. This consideration alone ought to be enough to prove the superiority of the Bay des Chaleurs route.

But there is another of more importance ; the shortening of the route between Canada and Great Britain. In taking Montreal as a point of comparison we find the followiug results :

From Liverpool to Paspebiac by sea.....			2,500	miles
From Paspebiac to Matapedia via B. Chaleurs R. Road, now building.....	101	miles		
From Matapedia to the Chaudiere Junction, via Intercolonial.....	294	"		
From the Chaudiere Junction to Montreal, via G. Trunk.....	163	"	568	"
From Liverpool to Montreal, via Paspebiac....			3,068	"
From Liverpool to Halifax, via navigation.....			2,480	miles
From Halifax to the Chaudiere Junction via Intercolonial.....	680	miles		
From the Chaudiere Junction to Montreal, via G. Trunk.....	163	"	843	"
From Liverpool to Montreal, via Halifax.....			3,328	
From Liveropol to Portland, via navigation....			(1) 2,790	miles
From Portland, to Montreal, via G. T.....			297	"
From Liverpool to Montreal, via Portland.....			3,093	"

(1) Sanford Fleming's figures.

That is to say that the Paspebiac route is 25 miles shorter than that of Portland and 255 shorter than that of Halifax.

In taking the mean time of the steamers and passengers train we find the following figures :

	Sea	*Land*	*Total*
By Paspebiac	156.25	22.75	179.00
" Portland	174.75	12.00	186.75
" Halifax	155.00	33.75	188.75

The Paspebiac route is 7.15 hours shorter than that of Portland and 9.15 hours shorter than that of Halifax, which is of great importance to passengers and the mail.

Port Paspebiac occupies an exceptionally advantageous position in every point of view and it is of the greatest importance in winter as well as in summer, to put it in a constant communication with the great cities of Canada, in order to keep up the traffic on our canadian railroads, which at present is sent to the U. S. ports by american roads. To have this traffic in our countries a railroad between Paspebiac and Matapedia (a distance of a hundred miles) must be built.

In a transcommercial and interprovincial point of view, this B. des Chaleurs railroad is absolutely necessary and its construction will allay a great want.

It will open a new sea port town to the western provinces, and in particular it will open to the various produces of Bay des Chaleurs, the markets of Quebec, Montreal Toronto and Winipeg. At present, a great part of the sea fish, which is consumed in the provinces of Quebec, Ontario and Manitoba, comes from the U. States. In 1882, these importations amounted to 7,500,253 lbs or 3,753,56 tons, and $288,559 for the three provinces.

The following list will give the quantity and value imported to each of the provinces.

		Ontario		*Quebec*		*Manitoba*	
Codfish, sharper and pike...	1,691,716 lbs	$74,396	3,187,480 lbs	$122,299	104,669 lbs	$2,598
Herrings.....	658,199 "	15,296	88,727 "	2,647	40,469 "	1,139
Mackerel.....	133,885 "	4,787	19,963 "	966	49,969 "	1,706
Diverse Fish.	0,577 "	515	.....	.....	1,286 "	182
Lobster.....	5,806 "	398	145,248	4,361	8,838 "	804
Salmon.....	225,309 "	21,761	97,346 "	14,506	39,275 "	3,112
Total.....	3,723,492 "	$117,153	3,538,764 "	$61,405	244,897 "	$8,001

A great quantity of the above was taken in our fisheries, and sent to the american markets and then sold to us. Why should we buy our own goods from strangers? All valuable fish, in particular salmon, abound in Bay des Chaleurs and the waters which surround Gaspesia, what is needed, is a convenient and

speedy method of transport. Well, as we have already said, the Bay des Chaleurs rail road and the Intercolonial will supply this want and then we can do the business ourselves; we also can have cheaper and larger quantities of fish. In particular we require this road to send immense quantities of dry and salted fish to the ever growing population of Manitoba and the North West. Before many years, our fishermen of Gaspesia will have a large market which will pay well in their own country. That will compensate the lack in trade which exists between them and Europe, where the norwegian fishermen, who a few years ago learned how to save the cod fish, are making a strong opposition to our canadian fishermen. And as soon as this road would be opened to our fisheries, it would be easy to keep us in fish, because our fisheries can produce more fish than they do now.

The Bay des Chaleurs rail road would be a national enterprise. In the first place it will make our fisheries be highly considered by the exterior family it should give considerable traffic to the Intercolonial and the Great Canadian Pacific Rail Road, both of which were built by the government as a national enterprise.

The future of the finest part of Gaspesia depends on this R. Road. In America, colonisation does not advance without the help of railroads, and the region that neighbours Bay des Chaleurs and the Gulf of St. Lawrence, although richly endowed by nature, in its climate and soil and will not escape this unvariable law of progress. Let us build Bay des Chaleurs R. Road, and before many years the population of Gaspesia will be more than 100,000 souls its agricultural and forest riches will be explored and help a great deal to importation; commercial centers will rise and progress will be felt allthrough Gaspesia which will take the rank that it has a just claim to amongst the highest and most flourishing regions, not only in the Province of Quebec but also in all Canada. Till the present day, the agricultural population of Bay des Chaleurs has grown by the surplus of births over deaths, and it is so true that you cannot find more than one hundred of the farmers who were not born in the the country. It will be otherwise when a railroad will run along the shore. The fine land over which it will cross, will be better known, the agricultural produces will be sent to market in the winter as well as in summer, and then agriculture will offer so many advantages, that it will attract a

great number of colonists. The immigrant of Europe will be able to settle down there with the greatest of ease and will undoubtedly be followed by their friends and relations. The succes that they will obtain will encourages others to follow them. What is presently going on along the Intercolonial, in the Metapedia valley, gives us a good idea of what would be done in the richest and most advantageous region crossed by the Bay des Chaleurs R. Road.

New Carlisle would become, before many years, one of our principal sea port towns, and it is then that the Bay des Chaleurs R. Road would be one of the most important lines in the Provinces. It is only a question of time. Let this national railroad be endowed by the government with a large subsidy and then let its promoters show it ahead. Let the federal and local government not forget that : this road will give an extraordinary impulse to the colonization of Gaspesia, it will procure the advantage of a winter sea port, able to rival with Portland in every respect, without considering that it is nearer to Liverpool lwhere large quantities of western agricultural produces are exported.

CHAPTER XII.

CIVIL AND RELIGIOUS ADMINISTRATION—CHURCHES—SCHOOLS

Gaspesia is divided into judiciary districts, county and local municipalities. The counties of Bonaventure and Gaspe form each a judiciary district distinct from that of the region which lies within the limits of Rimouski. The seat of justice belonging to the district of Gaspe is at Percé, where there is a court house and all the officers of the court, with the exception of the judge who, in violation of the law does not reside there, and only goes there during the assizes. The seat of justice belonging to the district of Bonaventure is at New Carlisle. We must praise the Gaspesians for their conduct, and in the meantime say that the court officers are not much troubled by them. The counties of Gaspe and Bonaventure have good lawyers who can scarcely live by their profession.

The county municipality is administrated by the county council, which is composed of the mayors of the local municipalities. The president of the council is the county prefect. This council sits only when there is important business to be transacted that concernes the general interest of the county. There

is a Council for each of the counties of Bonaventure and Gaspe, and the remainder of Gaspesia is ruled by the administrative council of Rimouski county.

The local municipality, that is to say the parish is administered by seven councellors, whose president is called the mayor, they are elected by the parish tax-payers. This council sees after the roads at the local administrations. In 1880 there were twelve local municipalities in Bonaventure county and sixteen in Gaspe. The receipts and expenses of these municipalities are as follows :

	Bonaventure		*Gaspe*
Receipts.....	$3,720.19	.....	$10,418.04
Expenses.....	3,011.33	.....	1,834.64
Surplus of Receipts...	$ 508.82		$8,583.40
Active.....	$13,320,46	.....	$7,546.81
Passive.....	1,095.65	.....	394.71
Surplus of Active....	$1,224.81		$7,152.10

The figures of the expenses for the local administrations are insignificant when compared with the value of the taxed property, which was $1,245,158 in Bonaventure and $1,384,157 in Gaspe. The administration of the schools is under the control of commissioners and school syndics, who levy the school taxes and see after all that concerns the schools. Those commissioners and syndics are elected by the contributors, who also have an indirect control over the sums which are paid for public education. In Gaspesia, as in all the other parts of the Province, "primary education is obligatory, in the sense that all citizens are to contribute to the support of the schools, in paying a small taxe imposed on their property and amounting to as much as the government grant given to each municipality. Each father of a family is obliged to pay a monthly contribution of, from 20 to 30 cents for each child capable of going to school (from seven to fourteen) whether they go to school or not. The public fund destined to education is divided proportionally to the population and numberof scholars that frequent the primary schools or other educational institutions. A sum of $8,000 is annually granted to support poor schools, so that they who have school houses do not require to be troubled about the school taxes. In the localities of different religions, the majority rules. If the minority is

not satisfied with the administration of the schools, in what it specially concerns them, they choose three syndics to direct their own schools, and inform the president of their discontentment. From that out the schools of the minority are called dissident schools, and the syndics are invested with the same power over these schools as the commissioners over the school of the majority. In the meantime the commissioners continue to levy the taxes on all the municipality, but are obliged to remit the sum collected from the minority to the syndics, and also to divide the government grant proportionally to their population.

The above clearly shows that whether the minority or majority be catholic or protestant, there is never any oppression to be feared and in general perfect harmony exists between the different religions." (1)

The school fund comes from three sources : the taxes, the monthly fees, and the government grant.

The taxes are levied on proprietors.

The monthly fee is a taxe paid by each child going to school. These taxes are insignificant, as may be seen by the following figures, which show the amount of school receipts coming from each source :

	Bonaventure	*Gaspe*
Taxes.....	$10,595.80	$10,420.67
Monthly fees.....	2,468.39	547.55
Government grant.....	3,823.29	1,918.29
Total.....	$16,887.48	$12,886.51

Those two totals make a sum of $29,773.99 ; but there was only $24.032.41 paid by the contributors ; $13,064.19 by those of Bonaventure and $10,968.22 by those of Gaspe. Those different sums were spent in supporting 139 schools of which 105 were catholic and the remainder protestant, and were attended by 600 scholars. The above figures are taken from the report of the superintendant of public instruction for 1881-82. It is impossible to give the details for that part of Gaspesia which is included in Rimouski county, because the report is of all the county. Nevertheless the above details show that elementary education is not neglected in Gaspesia, because there is a school for every 43 scholars, and this education costs nearly nothing to the inhabitants, who pay no more than 5 cents a head

in Gaspe and 69 in Bonaventure, for school taxes; we must add that the parents, in general, are very zealous in sending their children to school.

The catholic priests of the diocese of Rimouski (of which Gaspesia forms a part) receive tithe, which consists of the twenty-sixth part of all grain a d potatoes in some places. Bishop J. Langevin is Bishop of the diocese and resides at the cathedral in Rimouski. The catholic priests of Gaspesia are about 100 in number. The protestant ministers are supported by collections made among their congregation or by the help which they obtain from certain associations formed in rich cities for the support of ministers living among poor congregations. It is easily seen that the catholics or protestants are not overburdened by religious contributions.

The following list shows the number belongnig to the diverse religions in Gaspesia.

	Bonaventure	*Gaspe*	*Rimouski*	*Gaspesia*
Catholics	13,877	17,755	16,725	41,358
Anglicans	2,173	2,536	15	4,724
Methodists	132	319	147	598
Presbyterians	2,670	43	365	3,078
Diverse sects	56	32	15	103
	18,908	20,685	17,267	56,860

That is to say the catholic population amounts to 85 per cent of the entire population.

The above figures show that, for what belongs to religious and civil administration is on no low footing in Gaspesia. The european who emigrates to this region so much favored by nature, is sure to find just and good laws to protect himself and his goods, and good schools for the education of his children, and, finally churches in which he can worship his God.

CHAPTER XIII

THE PRINCIPAL CENTERS OF POPULATION AND COMMERCE

To complete those notes on Gaspesia, it will be necessary to indicate the principal centers of commerce and population. The

excellent report of Dr Lavoie for 1869 will admirably suit the purpose. This gentleman, in his office as commander of *La Canadienne* and chief of the cruise charged with the inspection of the fisheries of the Gulf and of Bay des Chaleurs, has had all the opportunities of knowing these localities, and all that he has written about them, is remarquable for their exactitude and readily shows that they have been observed by a keen eye. We will cite them :

" Gaspe is situated at the extremity of the Bay from which it takes its name. This locality can not fail to augment in importance on account of the advantages of its port, which although not very big, is accessible and offers good shelter to large ships. The vessels that are not able to fight the Gulf storms, take shelter in that port, and here the fisherman's smacks are very often moored while they take in provisions or cargoes for other places. The houses that are scattered here and there on the top of a hill which overlook the port form a beautiful scenery. It is the most attracting and most wholesome place in Canada during the summer months. It is the most charming and in the same time the most picturesque watering place below. The waters of the bay are always of a moderate temperature, so agreeable and healthy to sea bathing, which envigorates those whose health has been ruined by sedentary habits or town life. There are other pleasures besides seabathing in this locality. The beautiful walks overshadowed by tall and handsome trees, extend along the bayshore, large trees growing along the shore, cast their shadows on the bay which afford a nice sail in the shade, and infine the picturesque scenery which meets the eye on every side, delights the spectator. A beautiful breeze, which rises about noon during the months of July and August, refreshes the tourists and gives health and strenght to the invalid who visits this charming place. Gaspe is the only port of the gulf in which you will meet whale fishing; they who give themselves up to this line, are generally descendants of hardy marins who, after the United-States independance, settled down in Gaspe and began whale fishing which paid very well at that time.

Properly speaking, there is no cod fish caught at Gaspe, but the greater part of the fish which is taken on the north and south coasts is brought there ready for exportation. This commerce brings a great number of ships into the port which gives work to

the poor of the place and the environs. The poor of the town have plenty of work in the port and the farmers cultivate their land better than in other places.

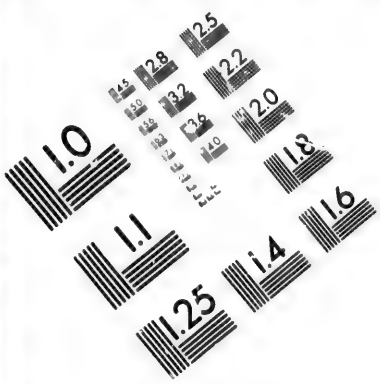
The most important and oldest fisheries are: Perce, Anse du Cap and Grand River. The banks situated around Bonaventure island and in the neighbourhood of Perce are excellent. When the fishing is bad on the coast, the fishermen go to the Orphelin or Moscou banks and they are sure of making a good hall of large cod fish which abound in those places. Perce employs the most fishermen. The port is very safe for small boats and the rocky shore of this locality serves well to save the fish. If Perce cannot boast of having a safe port, at least it can of its natural beauties, which cannot be found elsewhere; the soil is fertile, well cultivated and the inhabitants are remarkable for their politeness and cordiality. Perce is the central place of the district."

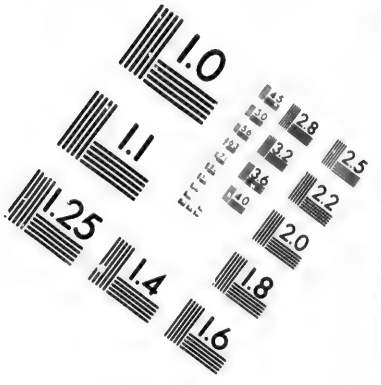
Grand River is the most populated, (2,150 souls) and richest parish in Gaspesia. The inhabitants work on their land and there are farms that cannot be surpassed in many western places. New parishes are opening on the interior where the soil is very fertile and easily cultivated. At the mouth of the river the village forms an amphitheatre which is delightful to the eye. This locality has a rich and clean appearance.

Anse du Cap is where the Honble Mr Thomas Savage resides. This gentleman exports each year several cargoes of dry fish which are generally loaded in this port. There are several other merchants here who are very active in commerce. This place is frequented by schooners that carry on the commerce of coast trading.

"Paspebiac is one of the nicest parishes in Bay des Chaleurs. The land is fertile and well cultivated. The farmer's houses are neat and well built. The port, which is not as safe as that of Gaspe, is good and accessible."

"Here is where the Robin firm, whose fortune is counted by the million, has its principal business place; the residence of the manager plainly shows that his masters are millionaries of the Isle of Jersey. A few miles from Paspediac port, is the residence of the Honble T. Robitaille, now lieutenant governor of the Province of Quebec, and a little further, the coquettish vil-





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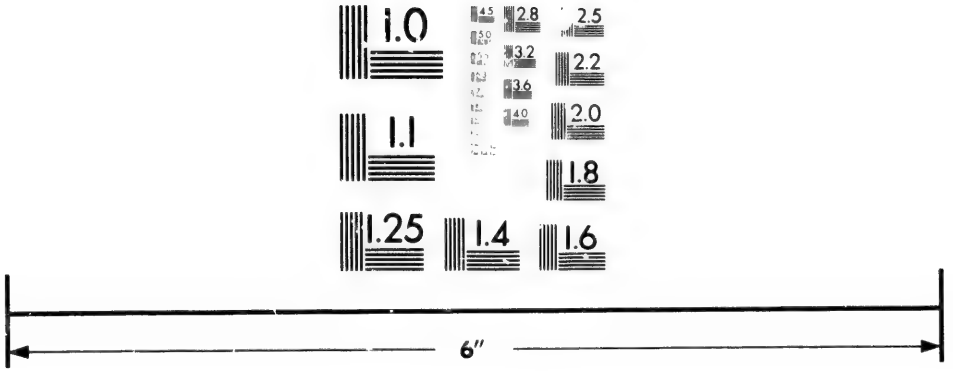

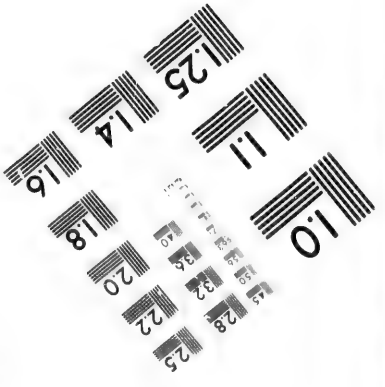

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lage of New-Carlisle, which is the central place of Bonaventnre county.

New-Richmond, between the two Cascapedia rivers, is a very nice parish where Mr Montgomery deals in wood or at least did for many years.

Carleton is the most prosperous and the most advanced parish in Bay des Chaleurs. The village is built on the side of the Tracadigeche bay, at the foot of a mountain whose height is about 300 feet, and is surrounded by the most picturesq ue scenery that can be imagined. This locality is very much sought after as a bathing place and will be more so, when there will be an hotel built to accomodate all those that desire to pass the summer season there. It is one of the finest and richest parishes, if not the richest and best in Gaspesia. There is considerable commerce going on there at present, which cannot miss to become greater with the impulse that the Intercolonial has given it and that the Bay des Chaleurs R. R. will not fail to give. It is only fifteen miles from Dalhousie station, on the Intercolonial.

In the northern part of Gaspesia, the principal parishes on the gulf shore, are Matane and Ste-Anne-des-Monts; in the latter there is considerable commerce and the land is well cultivated. Ste-Anne has the great advantage of having in its midst an enterprising man, Mr Theodore Lamontagne, who gives work to a great number of persons.

Such are the principle places of Gaspesia in a commercial point of view. All these centers will increase with the population, that will not fail to rise when its riches and advantages will be better known to the european immigrants.

CHAPTER XIV

LAND FOR COLONIZATION—METHOD OF BUYING—FREE GRANTS

We have already seen that Gaspesia forms a territory of 10,783.73 miles or 6,900,941 acres in superficies. In 1881, there were only 666,115 acres of this extent occupied and 174,306 acres of it cultivated; then there were 6,234,826 acres more to be occupied and 6,626,635 to be cultivated. The above unoccupied space could easily afford ploughable farms for

100,000 souls. The price of the government land varies from 20 to 30 cts an acre. The acre is about one eleventh more than the french arpent and about half less than the hectare, (0,404,671 of a hectare). The conditions of sale are the same for the immigrants as they are for the canadian colonists, and the formalities to be fulfilled are very simple.

Whoever desires to buy a farm, should apply by letter or personally, to the land agent of the district in which he wishes to settle down, and deposit into his hands the one fifth of the price of the lot. On this deposit, the agent gives him a promise of sale, officially sealed. The principal conditions of this sale are as follows :

To pay one fifth of the price in cash and the remainder in four equal annual payments, bearing interest at 6 *o/o* per year; to take possession of the lot six months after the date of sale and to reside there or others who represent him, for two years from the date of possession. In the course of four years, he is obliged to have ten acres for every hundred of the land in cultivating order and a house no less than sixteen by twenty feet square.

The sale is not considered legal unless the above conditions be fulfilled, whether the land be paid for before the time or not.

The agents are bound to inform the colonist of the different qualities of the land situated in their agencies, and to sell the lots at the price fixed by the government, to the first buyers. More than two hundred acres will not be sold to the same person, but a father of a family can buy lots for his sons, although they be very young. The government free grants of land are situated along the four principal roads, which are :

1o The road from Matane to Cape Chatte, which runs along the south shore of the gulf and crosses the townships of St-Denis, Cherbourg, Dalibaire, Romieu, in Rimouski county, and the township of Cape Chatte, in Gaspe county. There are 3,042 acres of free land along this road. The government agent for this township is George Sylvain, of Rimouski.

2o *The maritime road*, which is the continuation of the above extends as far as Rivière au Renard. This road crosses the seigniory of Ste-Anne des Monts, the townships of Tourelle, Christie, Duchesnay, Mount Louis seigniory, Taschereau township, Madeleine seigniory, Denoue township, Grand Valley des Monts seigniory, Chloridorme township, the Anse de l'Etang seigniory,

Sydenham township and a part of that of Rivière au Renard, all of Gaspe county. There are 20,338 acres of free land along this road. The agents are: W. H. Annett, who lives at Gaspe Bassin and Louis Roy who lives at Cape Chatte.

3o *The Kempt Road*, which begins at Ristigouche river, crosses the townships of Ristigouche, Assemetquagan, Casupscul, Lepage, Metapedia seigniory, Cabot township and runs out to the St-Lawrence at Metis. There are 18,419 acres of free land along this road. The agents are G. Sylvain, who lives at Rimouski, and G. F. Maguire who lives at New-Carlisle.

4o *The Metapedia road*, which begins at Ste-Flavie, on the St-Lawrence, crosses Cabot township, lake Metapedia seigniory, the townships of Lepage, Casnpscul, Assametquagan, Ristigouche and end at the confluence of the rivers Metapedia and Ristigouche. There are 12,452 acres of free land along this road. The agents are G. Sylvain, of Rimouski, and G. F. Maguire, of New-Carlisle.

The number of acres to be granted by the government is 54,251 acres and the lieutenant governor in council has the power of augmenting the number if it be necessary. The land agent of each district, as long as there be disposable per lots, is obliged to accord a permission to occupy one hundred acres to whoever asks it, providing he be eighteen years of age. The receiver of this permission must occupy the lot in one month from the date of the permission, or if not, his right of possession is confiscated. If he has a house built on his lot and twelve acres of the land fit for cultivation at the end of his fourth year, the government gives him a deed gratis.

The land offered for sale and which has been measured at the expense of the government forms an extent of 1,066,453 acres, that is 373,587 acres in Rimouski county; 248,132 in Gaspe county and 444,734 in Bonaventure county. Those figures are taken from the colonist's guide of 1880, published by the Crown Land Department.

The following table taken from the colonist's guide gives the quality, description and price of the land offered for sale.

Agency	*Townships*	*Extent*	*County*	*Prix*	*Remarks.*
Geo. Sylvain, Rimouski,	Awantjish ...	29,476	Rimouski...	30c.	Soil generally good for cultivation, diversely wooded and well watered, partly crossed by the Metapedia road.
Attainable in all season of the year by the Intercolonial from Quebec to Rimouski and Matapedia.	Cabot	28,655	"	"	Soil wood. &c. as above. Crossed by the Matapedia and Kempt roads.
	Casupscul ..	20,087	"	"	Soil in general good for agriculture, the woods are greatly burned ; mountanious and rocky in places, 1st range is crossed by the Matapedia and Kempt roads and also by the Intercolonial.
	Cherbourg..	17,146	"	"	Soil generally fertile and fit for cultivation, well wooded and watered, part of the second and first range is mountaneous and rocky. 1st range is crossed by the Matane road at Cape Chatte.
This division is crossed by the Intercolonial.					
	Dalibert	19,983	"	"	
	Humqui.....	29,881	"	"	Soil excellent, diversely wooded, especially with maple, well watered and crossed by the river Tache.
	Lepage	17,925	"	"	Good soil, the woods are partly burnt, well watered and crossed by the Matapedia road.
	Matane....	57,788	"	"	Excellent soil, partly burnt, crossed by the Intercolonial.

	McNider...	31,470	Rim'ki	30c. Excellent soil, well wooded and watered.
	Métalik....	30,217	"	" Good agricultural soil. Mountaneous towards the river. The bush nearly all burnt near the river. Crossed by the Intercolonial.
	Nemtayé...	34,817	"	" Soil somewhat hilly, but good. Cedar & spruce in abundance. Well watered.
	Rom. (par.)	9,190	"	" Soil excellent, diversely wooded and well watered. Part of the 2nd range mountaneous, situated on the Matane road at Cape-Chat.
	St. Denis...	12,313	"	" Good soil well wooded and watered. Good hard wood behind.
	Tessier	21,863	"	" Good soil, diversely wooded, in particular with maple and birch. well watered.
	Total ...	73,587		
Louis Roy, Cape Chat, Gaspé County.	Rom. (par.)	5,112	Gaspé..	" Pretty good soil, very few rocks, a little spruce.
	Cape Chat..	24,873	"	20c. Arable soil, somewhat hilly, but in general good.
	Tourelle ...	15,059	"	" Dry on the 1st range good enough in the others, very good for farming.
Attainable by water or the Intercolonial from Quebec to Metis, from there the ordinary road to Cape Chat;	Christie....	12,514	"	" Mountaneous and dry Good enough at Cap aux Renards.
	Duchesnay ..	14,995	"	" Very mountaneous, soil good enough in certain valleys

afterwards the maritime road on all the agency.			Gaspé	20c.	(Marsouin and Anse pleureuse) in great part habitable.
	Taschereau.	7,225	"	"	Land generally good, very mountaneous.
	Denoue.....	5,529	"	"	Dry and mountaneous, the western part joining the Madeleine seigniory is very good, the remainder bad.
	Total.....	86,409			
W. H. Annett, Gaspé Basin.	Cap Rosier.	5,719	Gaspé	20c.	Mountaneous; 1st range ploughable.
	Cloridorme.	4,589	"	"	Mountaneous; 1st range ploughable.
	Douglas.....	1,900	"	"	Level, good arable soil.
Steamer from Quebec or Campbellton to Gaspé Basin, from where we can go to the different parts of the agency by the common roads.	Douglast'n..	73	"	"	Not ploughable.
	Fox.....	8,115	"	"	Mountaneous; but good land on both sides of the river.
	Gaspé bay, S	9,072	"	"	Ploughable.
	Gaspé bay, N	6,017	"	"	do
	Malbaie	23,233	"	"	Mountaneous; but good land on both sides of the river.
	Newport	43,515	"	"	The 1st range is not very good, the back ranges are ploughable and good square timber.
	Percé	18,713	"	"	Mountaneous, excellent soil in the 1st ranges.
	Sydenham .	19,161	"	"	Mountaneous in the interior, good land on the Dartmouth and the St-Lawrence.
	York.....	16,239	"	"	Partly mountaneous, the remainder ploughable.
	Fortin..... Rameau	5,600	"	"	Very mountaneous, poor.

	ISLANDS				
	York River.	131	Gaspé.	50c.	Excellent soil.
	St. Jean "	278	"	"	
	Dartmouth"	377	"	"	
	Total.....	162823			
		84,309			
		248132			
M. Beauchène, New Carlisle, Bonaventure County.	Assemetquagan	30,083	Bonaventure	20c.	Mountaneous, partly ploughable, advantageous for square timber
	Carleton	23,230	"	"	Very mountaneous, not very good for cultivations. advantageous for fire wood.
Steamer from New Carlisle to Quebec in summer, and Intercolonial as far Campbellton in winter, and from these roads to all parts of the agency, and in summer a steamer from Campbellton to all the other localities as far as Gaspé.	Cox.....	38,198	"	"	Generally good for cultivation, square timber, limestone.
	Hope.....	20,440	"	"	Good for cultivation, square timber in the back township.
	Hamilton ...	53,490	"	"	Good for cultivation, square timber.
	Mann.....	20,980	"	"	Generally mountaneous, there are good lands in the valleys and fit for cultivation, very little square timber.
	Matapédia..	33,625	"	"	Mountaneous, very little square timber, the valleys are good for cultivation
	Maria	14,370	"	"	Good for cultivation, very little square timber.
	Milnikek ...	35,902	"	"	Not very good for cultivation, good for square timber.
	Nouvelle....	38,645	"	"	Partly good for cultivation, very little square timber.

New-Richemond.....	31,253	Bonav.	20e.	Good for farming and square timber.
Patapédia...	33,300	"	"	Mountaneous, not very good for cultivation or square timber.
Port-Daniel.	44,170	"	"	Good for cultivation and square timber, limestone in abundance.
Ristigouche	26,920	"	"	Good for culture—very little square timber, crossed by the Intercolonial.
New Carlisle	128	"	"	Good for cultivation, the soil is somewhat soapy.
Total	444734			

These lots are sold on the following conditions: 1o. the buyer or one representing him should take possession of the lot before the end of six months from the date of sale, and continue to reside on and occupy it for two years, from the date of sale; 2o. should clear ten acres for every hundred and build a house being at least 16 by 20, before the end of four years; 3o. should not cut any other timber but what he might require for building, fencing or clearing the land before obtaining his deed and all wood cut contrary to the above rules is considered illegal; 4o. the buyer will not obtain his deed, if he does not fulfill the above rules; 5o. he cannot receive his deeds before the expiration of two years from the date of sale, nor until the above conditions be fulfilled, whether the land be paid or not; 6o. the buyer binds himself to pay for all the improvements that are made on a lot which has been formerly occupied by an other; 7o. the sale is subject to a licence of cutting wood which is in force at the present time.

These conditions are very liberal and when the colonist is honest and industrious, the government gives them encouragement to fulfil those conditions and is not exact about the annual payments. Consequently it is very easy to settle down in Gas-

pesia. Thus a father of a family who has two grown up sons, can take a lot of 600 acres, two hundred for himself and as much more for his two sons, for $120. or $180., because the land is in general sold for 20 or 30 cts per acre. In places where there are government grants, he can have the land for nothing. And these farms are fertile and easily cultivated. It is not to be doubted ,says Commander Lavoie, that the counties of Gaspe and Bonaventure would be, to day, the richest in the country, had the wealthy merchants and the poor fishermen known the abundant ressources of riches which these forests and lands contain. The population of this part of the country, where ten acres of land would produce enough for a large family, whereas a hundred acres would not do the same in other parts of Canada, is poor on account of their aversion for land tilting. Experience will show to the inhabitants of Gaspesia that agriculture is a sure source of riches. There are more than 280 miles of land that lie along the coast, by which, the farmers without neglecting their land, could catch enough of fish for their family and besides sell a good deal to the merchants who pass up and down the coast. The equal of the soil is not to be found in the Dominion, and the colonist can become rich, in a few years, or at least comfortable, providing he be intelligent and industrious. Indeed if the Gaspesian colonist proceeds methodically in dividing his time between farming and fishing when his farm does not require his help, he would become rich before many years. The greater part of the fishermen neglect their land to that extent that they have to buy provisions which they could raise on their own land, but if they laboured their land it should produce enough to support their families and the money which they receive for their fish could be saved and after a few years they would have a small fortune. An intelligent and industrious farmer without neglecting his land, can make from $250 to $300 by fishing.

Is there any place in the world that offers more advantage to european immigrants ?

There is a class of people in Europe that would prosper in Gaspesia, they are the inhabitants of the coasts of Ireland and Britany. Those people live by fishing and farming. But their land is more or less fertile, and their fisheries are not to be compared to those of Gaspesia. Those poor people work hard but are nevertheless in poverty. It it not evident that they would become rich, were they to come to this country which is laden

with all sorts of riches with which nature has endowed it. It is always hard to leave our native land ; the thought of our ancestors, friends and relations and in particular of that homestead where for centuries our ancestors have lived and died is very hard to dispel ; but when parents think of procuring fine farms for their sons in a land of abundance and prosperity, they will not hesitate to leave their barren shores and come to the land of milk and honey. They will be received with the open arms and grateful hearts of the good natured inhabitants of Gaspesia. Those people are kind and fond of strangers, and they always receive them with open hearts, whatever may be their religion or nationality they belong to.

CHAPTER XV

HOW AND WHEN TO GO TO GASPESIA

It is very easy, particularly during the navigation season, to go from Quebec, New-Brunswick, Nova Scotia, to Gaspesia. There are several lines of steamers that run between the above ports and Gaspesia. The Quebec line makes two trip, each month, between Montreal, Quebec, Metis, Gaspe, Perce and other ports of Bay des Chaleurs. The *Beaver*, which belongs to Mr Al. Fraser, of Quebec, runs between Quebec and all the ports of Bay des Chaleurs as far as Paspebiac. The fare, on these two lines, is very cheap. There are schooners that run between Quebec and the above ports nearly every day in summer season, and the fare is very cheap.

The Intercolonial R. R. that runs from Quebec to Halifax and St-John, the two sea-port towns of Nova-Scotia and New-Brunswick, crosses the western part of Gaspesia and thus affords the inhabitants in its whereabout the opportunity of selling their produce and exporting it. This is a first class road and the government that built it deserves great credit. This road is in communication, at Campbelltown, with a line of steamers paid by the govenrment for running to the different lower localities situated on the shores of Bay des Chaleurs. By this line, we can go cheaply to all those localities. They who go to the north of Gaspe, are obliged to stop at Rimouski and take the high road to whereever they wish to go.

The crossing between Europe and Gaspesia is very easy. There are several lines of steamers that run between the ports

of Great Britain and those of Quebec and Halifax. The most recommendable are the Dominion and Allan lines, which have agencies in Paris and in all the principal cities of Ireland, Scotland and Great-Britain. The Allan steamers leave Liverpool and Glasgow and generally stop at Londonderry from where they steer directly to Quebec in summer, and Halifax in winter. The Dominion steamers also run between Liverpool and Quebec in summer, so that they offer the same advantages as the Allan line, to all immigrants desiring to settle down in Gaspesia. The voyage from Liverpool to Quebec or Halifax, lasts no more than ten days, and the steerage passengers are treated with as much respect and care as the cabin passengers. As soon as the steamers arrive at Quebec or Halifax, the Company sends, at their own expense, the passenger's baggage to the next rail road station. The passengers can remain on board of the steamer for 24 hours after her arrival, excepting when she is obliged to continue her journey with the mails. The captain is obliged to let the passengers off with their baggage, on a convenient wharf of the city and that between sun rise and sun set, without any extra charges.

The immigrants should come to Gaspesia in the spring time. The fishing begins then, and if he has no other means of supporting his family, he can hire a boat and fishing tackle from the big fishing-houses. Those houses will give him provisions for him and his family, on credit, in awaiting his fish produce. In the meantime, if he be active and laborious, he can take a lot of bush land and clear some of it, which he can till the following year. That will help and allow him to build a little house for him and his family. An acre of land sown in potatoes and vegetables will give enough of provisions for a large family, without speaking of the quantity of fish that can be caught for family use. Vegetables, potatoes and excellent fish is not to be desprised and the immigrants can have all those with very little work. He can make a barge, nets &c., during the winter, and after a few years he will be nearly as well settled as the natives. Without that, he is certain of making a good living for his family by fishing.

CONCLUSION.

The notes given in this sketch have been carefully put together and show things as they are. They clearly prove that Gas-

pesia not only offers the immigrant advantages and prospects of making a good living from his arrival, but also of making a fortune for himself and his children. How could it be otherwise ? The country abonuds in all kinds of ressources and riches. The soil is fertile and easily cultivated, as Commander Lavoie marked in his report. The forests are thickly wooded with the best of wood of all kinds, and are awaiting the colonist's and lumber-man's axes. The fisheries abound with all kinds of the best of fish, witn which merchants have made millions, and the greatest part of the population their living; indeed, it may well be said that the sea produces as much riches as the land.

In every respect, there is not a richer country than Gaspesia, principally the part neighbouring Bay des Chaleurs. The roads are good, the means of transport easy and cheap, the climate healthy—there are ten doctors in all Gaspesia—middle favorable to agriculteral purposes ; the sceneries are magnificent ; there are churches and schools, religious and civil administration which cannot be surpassed, the people are moral, honest, quiet and sympathetic ; finally, all that can be desired to make a people happy and comfortable is there : what more could be wished for ? Where is the country that could offer more to an immigrant ? We have often read works upon the labors and sufferings of the people that inhabit the coasts of England, Scotland and Ireland. We admire the courage and labor of those fine people. How happy would those poor people be, were they to live on the Gaspesian coast where they could follow their favorite occupation ! Perhaps these notes may meet their eyes and encourage them to come to this beautiful country, which we have wished to make known to them in this opuscula. Let them come and they will be received as brothers by our brave people of Gaspesia. Happiness, prosperity and comfort avail them, and when they will be settled down in abundance and riches, the thoughts of those beyond the ocean will cause them to sigh after their coming to enjoy part of God's blessing to them.

All the advantages which this region offers, principally the neighbouring of Bay des Chaleurs, have been stated by Mr A. J. Russell, a competent and well educated man : " Bonaventure county, says he, and the region of Ristigouche river, on account of the superiority of their soil and climate, but in particular on account of their excellent position of communication with Europe, offer as many advantages to immigrants as the Eastern townships and best parts of the Ottawa valley.

" The soil of Bonaventure county is fertile and free of stones, even on the hils which are never too deep to be ploughed. It produces large quantities of spring wheat, oats (which weighs 43 lbs to the bush.) and barley. The quality of the grain is far superior to that of the St-Lawrence banks.

" The soil of Gaspe county is the same. The fisheries of this county are very precious.

" I remarked that the interior region, as far as the St-Lawrence on the route adopted later on by Major Robinson, for the Intercolonial, is an arable and fertile soil, and the above opinion is based on the experience which I acquired, while directing th construction of more than one hundred miles of this road.

" This region is the most picturesque and the most holesome in all Canada. The winter temperature is more than 10° warmer than in Quebec, whereas during the summer months the valleys and hils are refreshed by the mild breeze coming from the sea.

" The rivers are navigable. Large boats worked by horses can go from the mouths of the rivers to their sources, the price of freight is a dollar less per ton, from these ports, than from Quebec, and all the sea and land explorations are at the will of the colonist. "

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